Actiontec™

USB/Ethernet

Home DSL Modem

User Manual

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Introduction

1

Thank you for purchasing the *Action*tec USB/Ethernet Home DSL Modem. This Modem can act as a DSL modem for a single computer, or as a router to connect multilple computers to a single broadband connection. This easy-to-use product is perfect for the home office or small business. If you want to take your computing to the next level, the *Action*tec USB/Ethernet Home DSL Modem is one of the keys to your success.

Package Contents

- *Action*tec USB/Ethernet Home DSL Modem
- Power cord
- Yellow cable (Ethernet)
- Purple cable (USB)
- Installation CD (Disk 1 [includes user manual])
- START HERE guide
- BLACK Quick Start guide

Minimum System Requirements

- Active DSL service
- Computer(s) with the following:
  - a 10 Mbps or 10/100 Mbps Ethernet connection, or USB connection
  - Microsoft Windows 98, 98 Second Edition (SE), Millennium Edition (Me), 2000, XP, or Apple Macintosh operating system

  ☞ ***Note***: USB LAN port is not supported with Microsoft Windows 95, NT 4.0, and Macintosh operating systems.

  - Internet Explorer 4.0+ (5.0+ recommended) or Netscape Navigator 4.0+ (4.7+ recommended)
- TCP/IP network protocol installed

Modem Features

The Modem has a series of LEDs (lights) and a variety of ports. It is recommended that the user become familiar with these features before installing or setting up the Modem.

Front Panel

There are 4 LEDs (light emitting diodes, or lights) on the front panel of the Modem.

Power LED

The Power LED glows green when power is supplied to the Modem. When it flashes, the Modem is going through its initialization process.

Ready LED

The Modem LED glows green when the Modem is connected to the Internet. When it flashes, the Modem is synchronizing the connection.

Link LED

The Link LED glows solid green when the Modem is connected to a computer via Ethernet or USB cable.

Activity LED

The Activity LED flashes when information is moving between the computer to which the Modem is connected and the Internet.

Rear Panel

The Modem has five ports on its rear panel.

Black Port (Power)

The Black port is used to connect the Modem's Power cord.

Yellow (Ethernet) Port

The Yellow port is used to connect the Modem to a computer on the home network with the Yellow (Ethernet) cable.

Purple (USB) Port

The Purple port is used to connect the Modem to a computer on the home network with the Purple (USB) cable.

Phone Port

The Phone port is used to connect the Modem to a telephone.

Line Port

The Line port is used to connect the Modem to the DSL connection.

Technical Support

*Action*tec Electronics, Inc., prides itself on making durable, high-quality, high-performance products. If you need assistance, the *Action*tec Technical Support Department is always available, 24 hours a day, seven days a week, to provide professional support.

***Action*tec Electronics, Inc.**

760 N. Mary Avenue
Sunnyvale, CA 94085

Technical Support
Phone: 1.888.436.0657
Email: techsupp@actiontec.com
Internet: www.actiontec.com/support

Setting Up The Modem

2

The instructions that follow parallel the steps contained in the *Action*tec Installation Buddy™, which provides a visual guide to setting up the Modem. It is recommended the user run the Installation Buddy first, before attempting any other procedures.

To set up the Modem, connect it to a computer. After connecting this first computer, other computers can be added to the network via USB, Ethernet, or wirelessly (see "Connecting Additional Computers on page 21).

☞ ***Note***: The Installation Buddy is not supported on computers running Windows 95 and NT 4.0, Macintosh, or Linix operating systems.

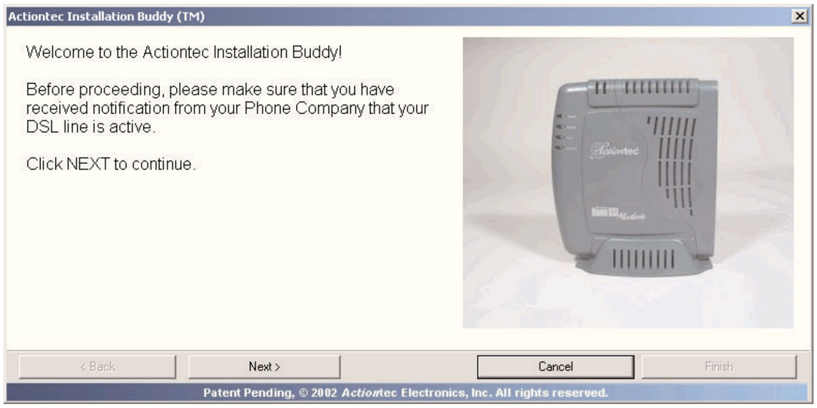
Connecting a Computer to the Modem

Connecting a computer to the Modem for setup involves three basic steps: initial setup, plugging in the Modem's Power Cord, and connecting the Modem to the computer.

☞ ***Note***: The following procedures are for U.S. installations only.

Connecting Via Ethernet

1. Insert **Disk 1** (Installation Buddy CD) in the CD-ROM drive of the computer. The Installaton Buddy will start automatically. Wait until the following screen appears, read the onscreen instructions, then click **Next**.

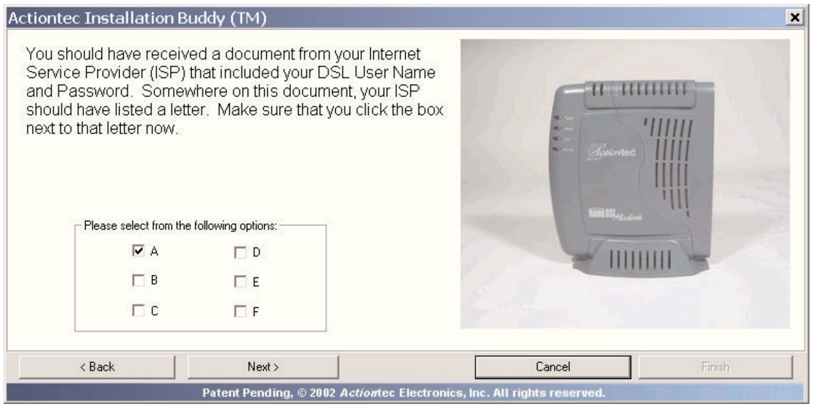

Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Welcome to the Actiontec Installation Buddy!

Before proceeding, please make sure that you have received notification from your Phone Company that your DSL line is active.

Click NEXT to continue.

2. The next window appears. Read the instructions, select one of the options by clicking in the appropriate box, then click **Next**. If the ISP did not provide this information, contact the ISP and request the information.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish
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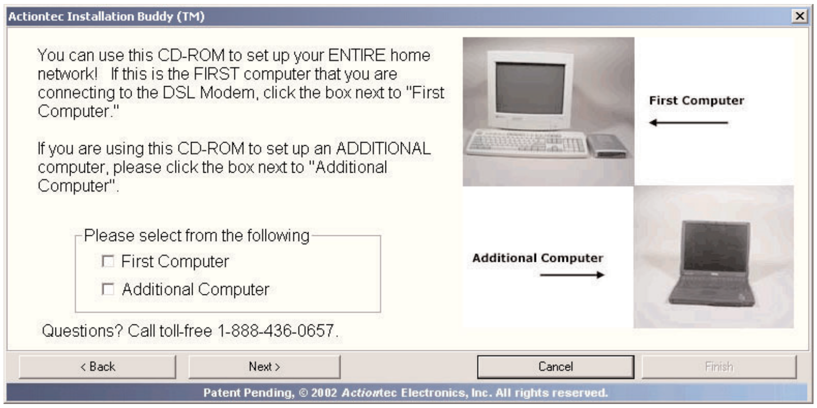
You should have received a document from your Internet Service Provider (ISP) that included your DSL User Name and Password. Somewhere on this document, your ISP should have listed a letter. Make sure that you click the box next to that letter now.

Please select from the following options:

☑ A	☐ D
☐ B	☐ E
☐ C	☐ F

3. The next window appears. Read the instructions, select **First Computer** by clicking on the check box, then click **Next**.


Actiontec Installation Buddy (TM)
First Computer
Additional Computer
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

You can use this CD-ROM to set up your ENTIRE home network! If this is the FIRST computer that you are connecting to the DSL Modem, click the box next to "First Computer."

If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".

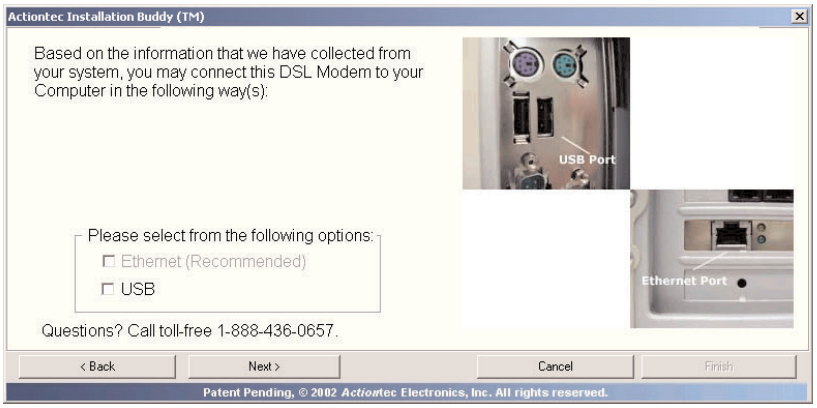
Please select from the following

☐ First Computer

☐ Additional Computer

Questions? Call toll-free 1-888-436-0657.

4. In the next window, select **Ethernet**, then click **Next**.


Actiontec Installation Buddy (TM)
USB Port
Ethernet Port
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Based on the information that we have collected from your system, you may connect this DSL Modem to your Computer in the following way(s):

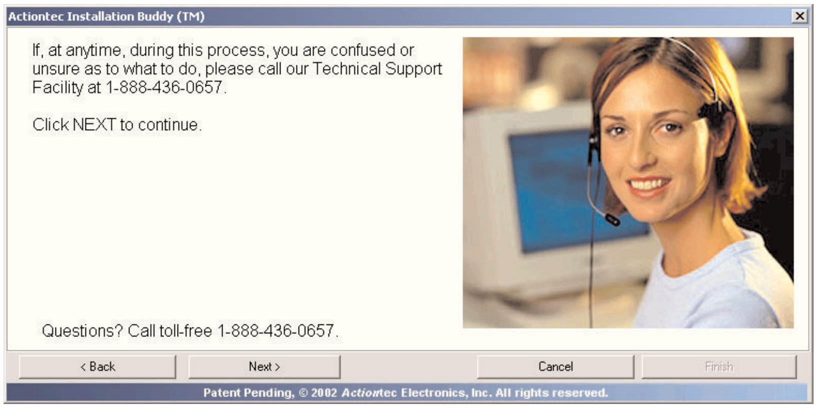
Please select from the following options:

☐ Ethernet (Recommended)

☐ USB

Questions? Call toll-free 1-888-436-0657.

5. The next window appears, with information regarding *Action*tec's 24-hour, 7-day-a-week Technical Support. If you have any problems, call **1.888.436.0657**. Click **Next**.

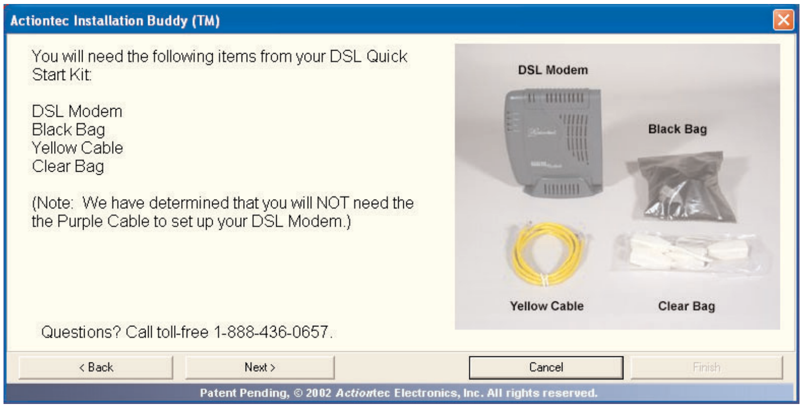

Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

If, at anytime, during this process, you are confused or unsure as to what to do, please call our Technical Support Facility at 1-888-436-0657.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

6. The next window appears, showing the items needed to set up the Modem. Click **Next**.


Actiontec Installation Buddy (TM)
DSL Modem
Black Bag
Yellow Cable
Clear Bag
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

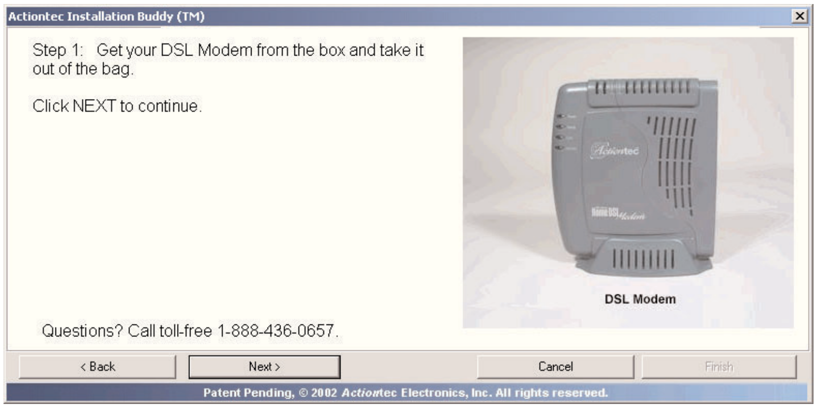
You will need the following items from your DSL Quick Start Kit:

DSL Modem
Black Bag
Yellow Cable
Clear Bag

(Note: We have determined that you will NOT need the the Purple Cable to set up your DSL Modem.)

Questions? Call toll-free 1-888-436-0657.

7. The next window appears. Get the Modem, take it out of its protective plastic bag, then click **Next**.

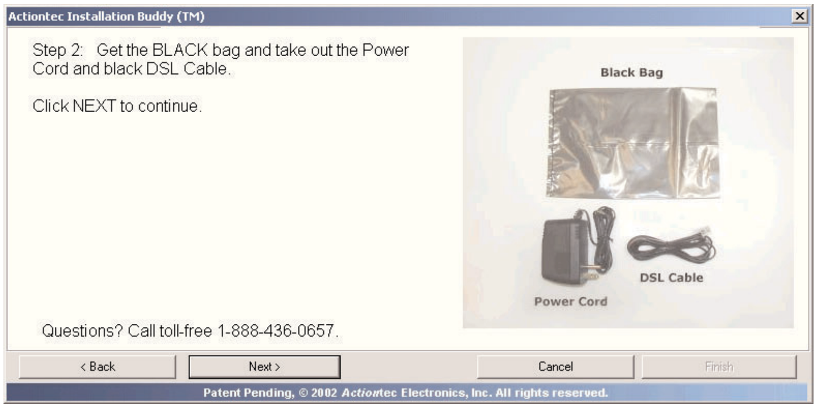

Actiontec Installation Buddy (TM)
DSL Modem
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 1: Get your DSL Modem from the box and take it out of the bag.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

8. When the next window appears, get the **Black Bag**, take out the **Power Cord** and **Black DSL Cable**, then click **Next**.

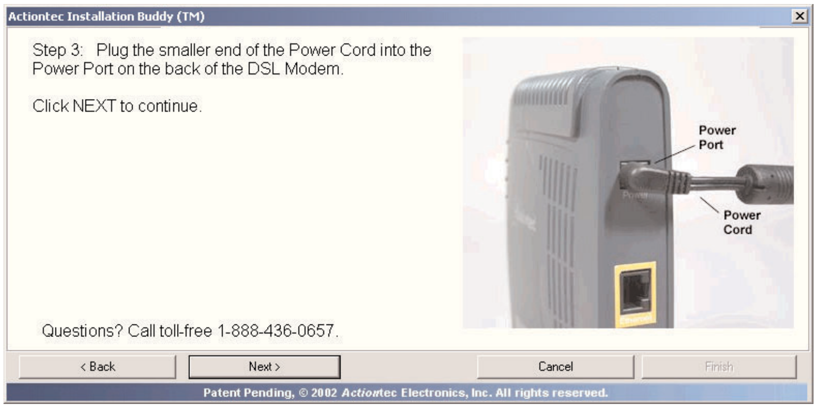

Actiontec Installation Buddy (TM)
Black Bag
DSL Cable
Power Cord
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 2: Get the BLACK bag and take out the Power Cord and black DSL Cable.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

9. In the next window, read the instructions regarding plugging in the smaller end of the **Power Cord** into the **Power Port** on the back of the Modem, then click **Next**.


Actiontec Installation Buddy (TM)
Power Port
Power Cord
< Back
Next >
Cancel
Finish
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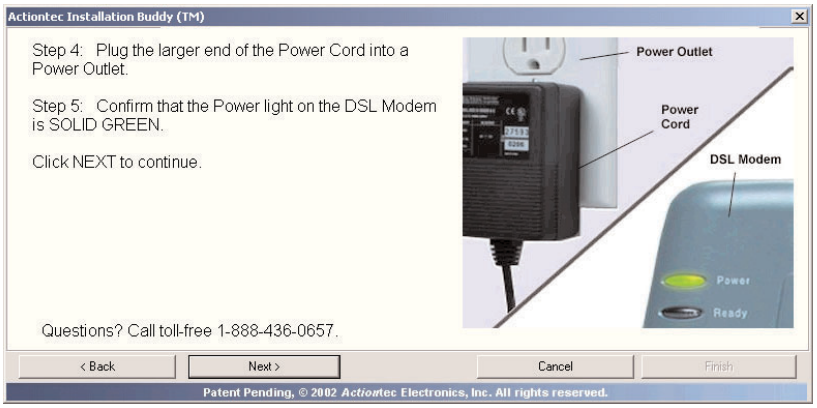
Step 3: Plug the smaller end of the Power Cord into the Power Port on the back of the DSL Modem.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

10. As shown in the next window, plug the larger end of the **Power Cord** into a **Power Outlet**, confirm the **Power Light** on the front of the Modem is **solid green**, then click **Next**.


Actiontec Installation Buddy (TM)
Power Outlet
Power Cord
DSL Modem
Power
Ready
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 4: Plug the larger end of the Power Cord into a Power Outlet.

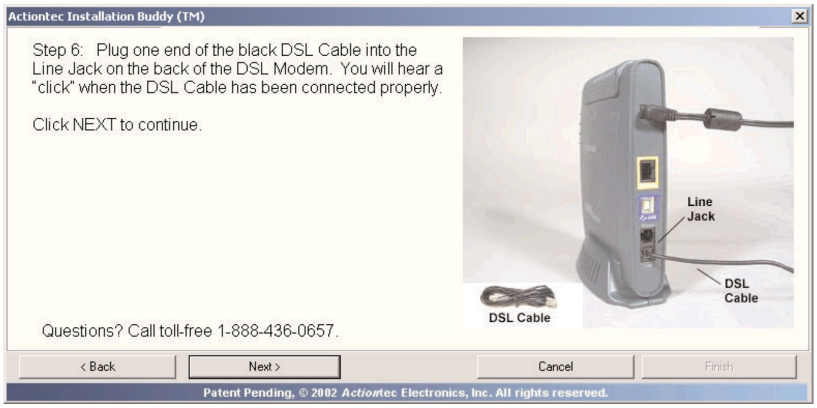
Step 5: Confirm that the Power light on the DSL Modem is SOLID GREEN.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

☞ *Note*: Depending on the country, the picture in the previous figure may or may not reflect the type of power cord supplied.

11. The next window appears. Plug one end of the **Black DSL Cable** into the **Line Jack** on the back of the Modem, then click **Next**.


Actiontec Installation Buddy (TM)
Line Jack
DSL Cable
DSL Cable
< Back
Next >
Cancel
Finish
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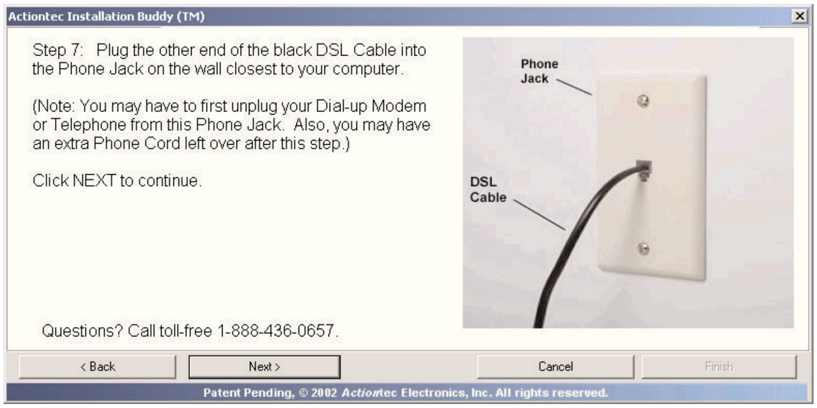
Step 6: Plug one end of the black DSL Cable into the Line Jack on the back of the DSL Modem. You will hear a "click" when the DSL Cable has been connected properly.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

12. When the next window appears, plug the other end of the **Black DSL Cable** into the **Phone Jack** nearest to the computer, then click **Next.**


Actiontec Installation Buddy (TM)
Phone Jack
DSL Cable
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

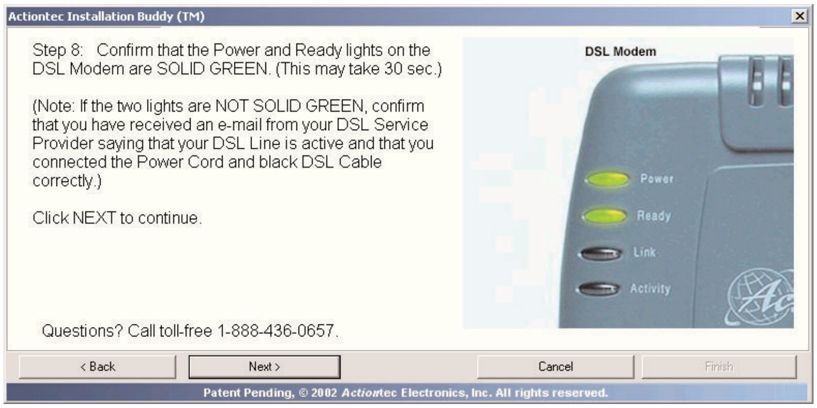
Step 7: Plug the other end of the black DSL Cable into the Phone Jack on the wall closest to your computer.

(Note: You may have to first unplug your Dial-up Modem or Telephone from this Phone Jack. Also, you may have an extra Phone Cord left over after this step.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

13. When the next window appears, confirm the **Power** and **Ready Lights** on the Modem **glow steadily green**. This may take up to 30 seconds. Click **Next.**


Actiontec Installation Buddy (TM)
DSL Modem
Power
Ready
Link
Activity
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 8: Confirm that the Power and Ready lights on the DSL Modem are SOLID GREEN. (This may take 30 sec.)

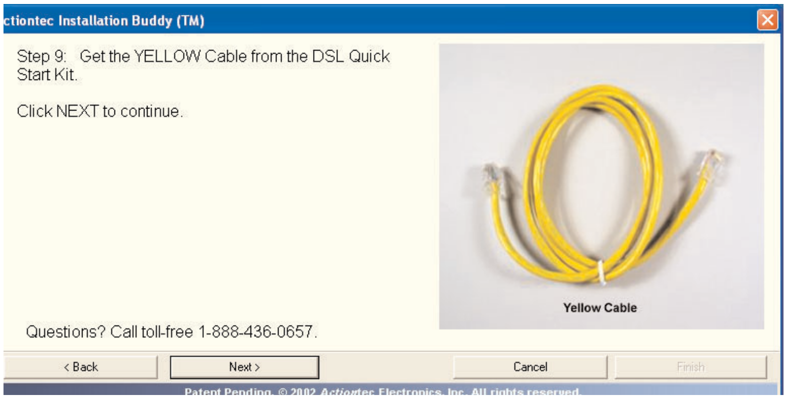
(Note: If the two lights are NOT SOLID GREEN, confirm that you have received an e-mail from your DSL Service Provider saying that your DSL Line is active and that you connected the Power Cord and black DSL Cable correctly.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

☞ *Note*: If the Power and Ready Lights on the Modem are not solid green, confirm your DSL service provider has activated the DSL line, and check all connections to the Modem.

14. The following window appears. Get the **Yellow (Ethernet) Cable** from the DSL Quick Start Kit, then click **Next**.



ctiontec Installation Buddy (TM)

Step 9: Get the YELLOW Cable from the DSL Quick Start Kit.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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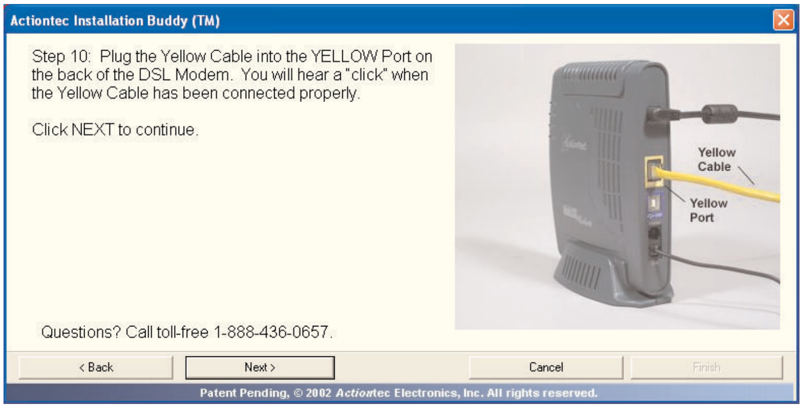
Yellow Cable
< Back
Next >
Cancel
Finish

15. When the next window appears, plug one end of the **Yellow (Ethernet) Cable** into the **Yellow Port** on the back of the Modem until it clicks, then click **Next**.



Actiontec Installation Buddy (TM)

Step 10: Plug the Yellow Cable into the YELLOW Port on the back of the DSL Modem. You will hear a "click" when the Yellow Cable has been connected properly.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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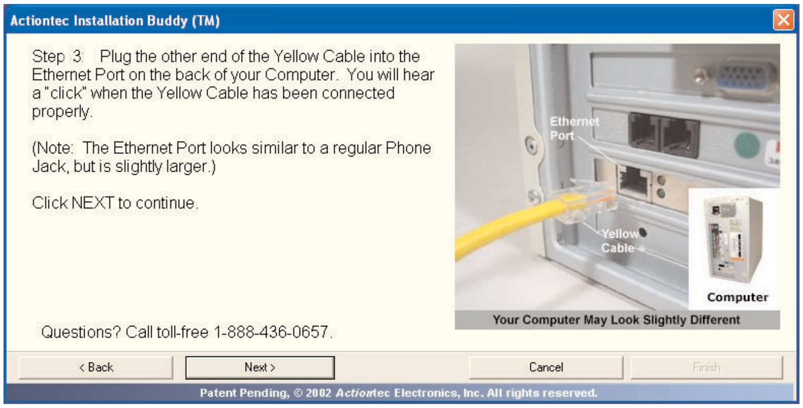
Yellow Cable
Yellow Port
< Back
Next >
Cancel
Finish

16. Another window appears. Plug the other end of the **Yellow (Ethernet) Cable** into an **Ethernet port** on the back of the computer until it clicks, then click **Next**.



Actiontec Installation Buddy (TM)

Step 3: Plug the other end of the Yellow Cable into the Ethernet Port on the back of your Computer. You will hear a "click" when the Yellow Cable has been connected properly.

(Note: The Ethernet Port looks similar to a regular Phone Jack, but is slightly larger.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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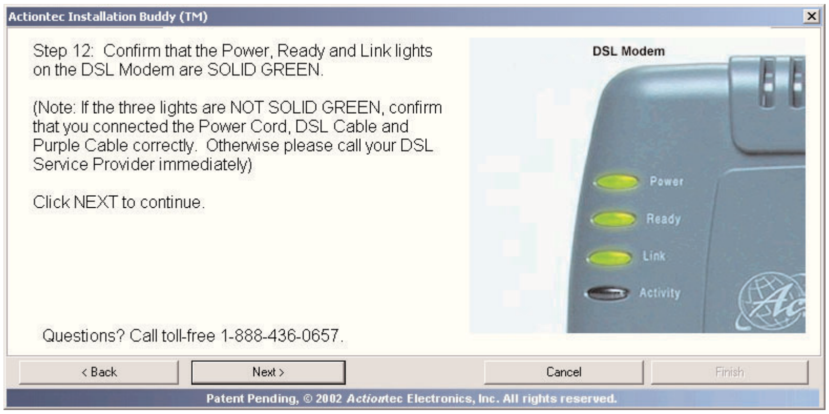
Ethernet Port
Yellow Cable
Computer
Your Computer May Look Slightly Different
< Back
Next >
Cancel
Finish

☞ ***Note***: An Ethernet port looks similar to a phone jack, but is slightly larger.

17. When the next window appears, confirm the **Power**, **Ready**, and **Link Lights** on the Modem **glow steadily green**. Click **Next**.


Actiontec Installation Buddy (TM)
DSL Modem
Power
Ready
Link
Activity
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 12: Confirm that the Power, Ready and Link lights on the DSL Modem are SOLID GREEN.

(Note: If the three lights are NOT SOLID GREEN, confirm that you connected the Power Cord, DSL Cable and Purple Cable correctly. Otherwise please call your DSL Service Provider immediately)

Click NEXT to continue.

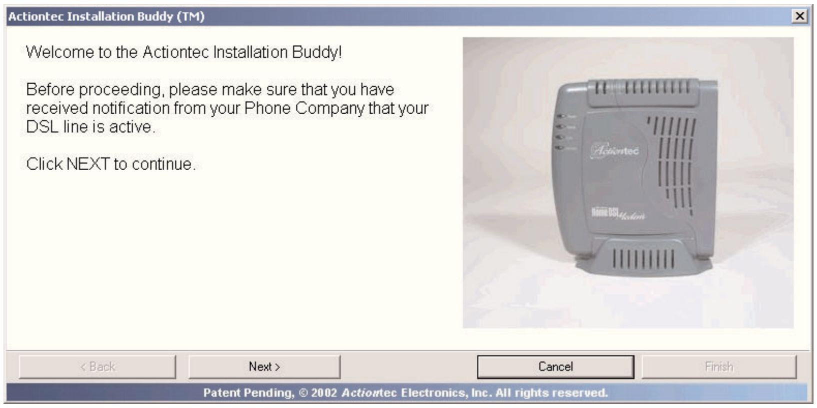
Questions? Call toll-free 1-888-436-0657.

☞ ***Note***: If the Power, Ready and Link Lights on the Modem are not solid green, check all connections to the Modem. If all connections are plugged in properly, call your DSL service provider.

The Modem is connected to a computer via Ethernet. Next, install the filters as described in "Installing the Filters" on page 17.

Connecting Via USB

1. Insert **Disk 1** (Installation Buddy CD) in the CD-ROM drive of the computer. The Installaton Buddy will start automatically. Wait until the following screen appears, read the onscreen instructions, then click **Next**.

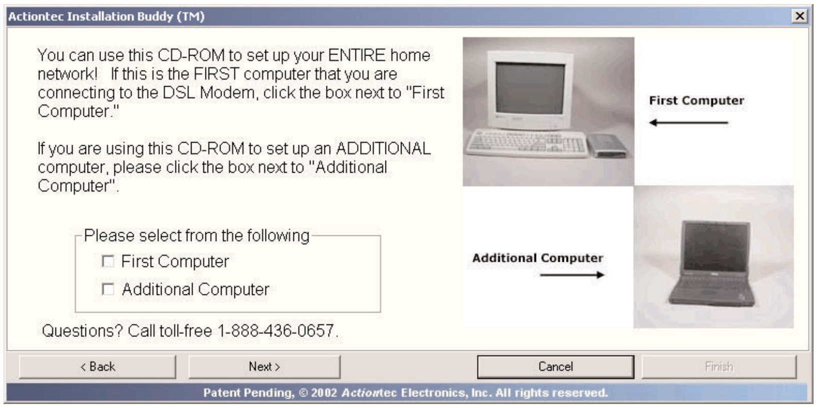

Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Welcome to the Actiontec Installation Buddy!

Before proceeding, please make sure that you have received notification from your Phone Company that your DSL line is active.

Click NEXT to continue.

2. The next window appears. Read the instructions, select **First Computer** by clicking on the check box, then click **Next**.


Actiontec Installation Buddy (TM)
First Computer
Additional Computer
< Back
Next >
Cancel
Finish

You can use this CD-ROM to set up your ENTIRE home network! If this is the FIRST computer that you are connecting to the DSL Modem, click the box next to "First Computer."

If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".

Please select from the following

☐ First Computer
☐ Additional Computer

Questions? Call toll-free 1-888-436-0657.

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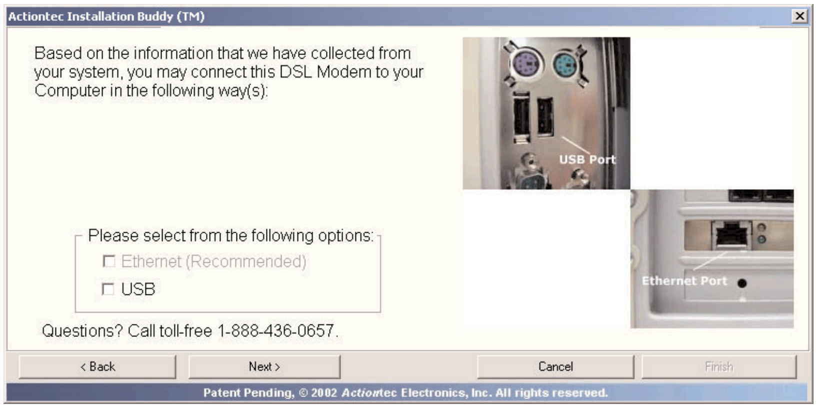
3. In the next window, select **USB**, then click **Next**.


Actiontec Installation Buddy (TM)
USB Port
Ethernet Port
< Back
Next >
Cancel
Finish

Based on the information that we have collected from your system, you may connect this DSL Modem to your Computer in the following way(s):

Please select from the following options:

☐ Ethernet (Recommended)
☐ USB

Questions? Call toll-free 1-888-436-0657.

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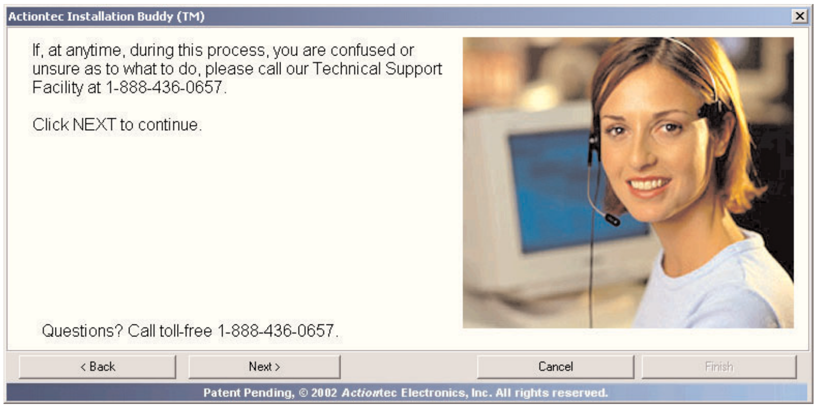
4. The next window appears, with information regarding *Action*tec's 24-hour, 7-day-a-week Technical Support. If you have any problems, call **1.888.436.0657**. Click **Next**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

If, at anytime, during this process, you are confused or unsure as to what to do, please call our Technical Support Facility at 1-888-436-0657.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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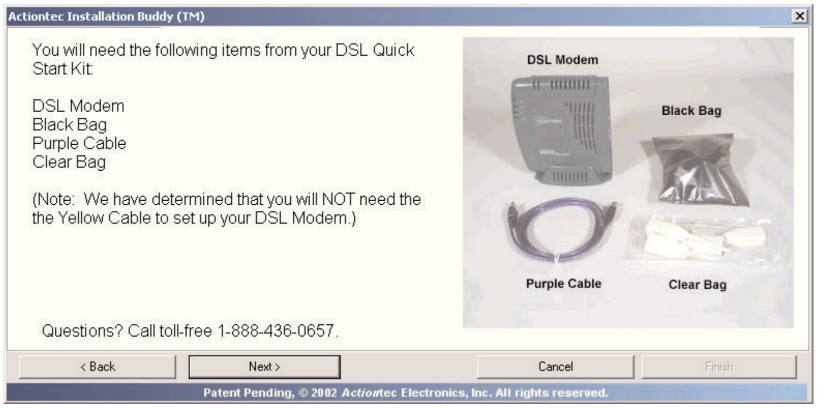
5. The next window appears, with information regarding the items needed to set up the Modem. Click **Next**.



You will need the following items from your DSL Quick Start Kit:

DSL Modem
Black Bag
Purple Cable
Clear Bag

(Note: We have determined that you will NOT need the the Yellow Cable to set up your DSL Modem.)

Questions? Call toll-free 1-888-436-0657.

Actiontec Installation Buddy (TM)
DSL Modem
Black Bag
Purple Cable
Clear Bag
< Back
Next >
Cancel
Finish
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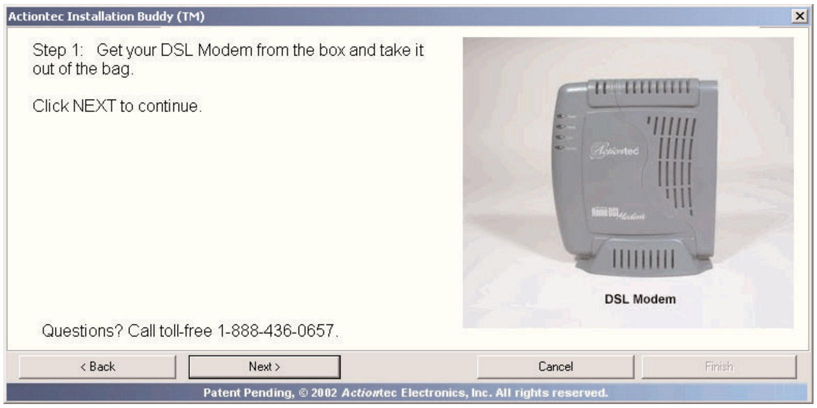
6. The next window appears. Get the Modem, take it out of its protective plastic bag, then click **Next**.



Step 1: Get your DSL Modem from the box and take it out of the bag.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

Actiontec Installation Buddy (TM)
DSL Modem
< Back
Next >
Cancel
Finish
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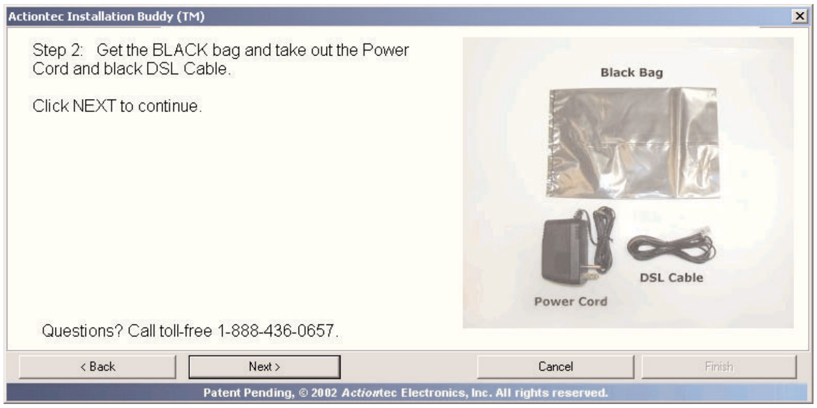
7. When the next window appears, get the **Black Bag**, take out the **Power Cord** and **Black DSL Cable**, then click **Next**.



Step 2: Get the BLACK bag and take out the Power Cord and black DSL Cable.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

Actiontec Installation Buddy (TM)
Black Bag
DSL Cable
Power Cord
< Back
Next >
Cancel
Finish
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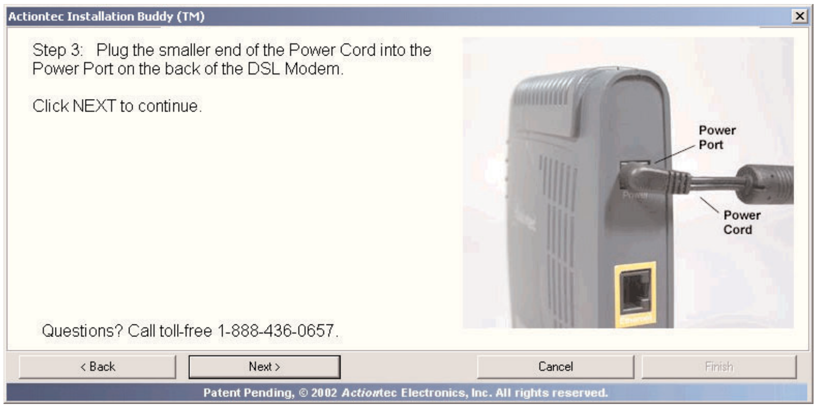
8. In the next window, read the instructions, plug the smaller end of the **Power Cord** into the **Power Port** on the back of the Modem, then click **Next**.


Actiontec Installation Buddy (TM)
Power Port
Power Cord
< Back
Next >
Cancel
Finish

Step 3: Plug the smaller end of the Power Cord into the Power Port on the back of the DSL Modem.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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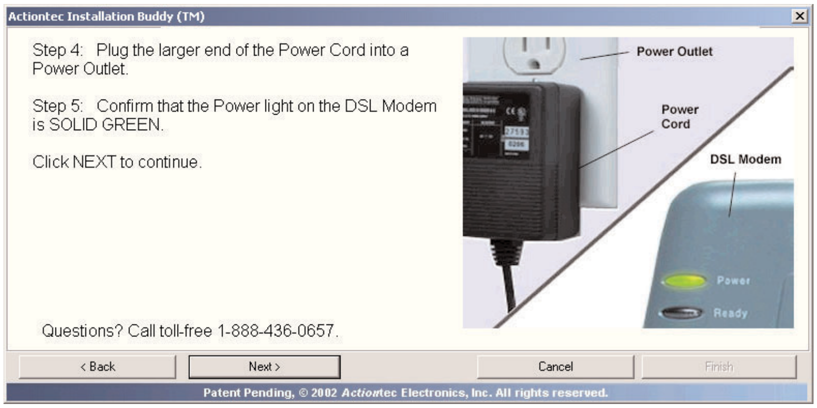
9. As shown in the next window, plug the larger end of the **Power Cord** into a **Power Outlet**, confirm the **Power Light** on the front of the Modem is **solid green**, then click **Next**.


Actiontec Installation Buddy (TM)
Power Outlet
Power Cord
DSL Modem
Power
Ready
< Back
Next >
Cancel
Finish

Step 4: Plug the larger end of the Power Cord into a Power Outlet.

Step 5: Confirm that the Power light on the DSL Modem is SOLID GREEN.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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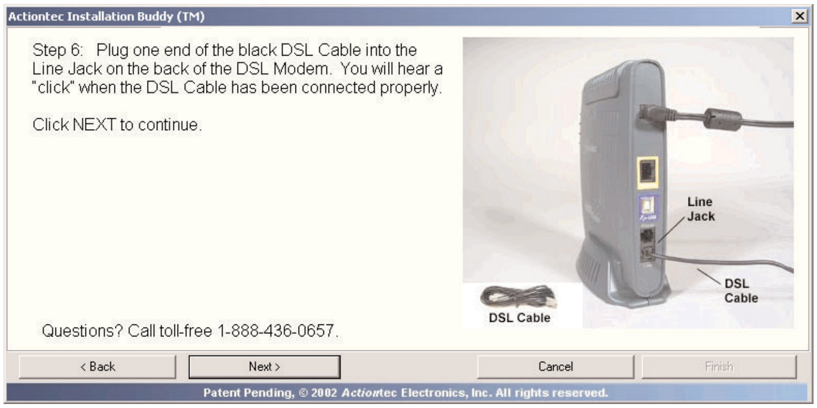
☞ ***Note***: Depending on the country, the picture in the previous figure may or may not reflect the type of power cord supplied.

10. The next window appears. Plug one end of the **Black DSL Cable** into the **Line Jack** on the back of the Modem, then click **Next**.


Actiontec Installation Buddy (TM)
Line Jack
DSL Cable
DSL Cable
< Back
Next >
Cancel
Finish

Step 6: Plug one end of the black DSL Cable into the Line Jack on the back of the DSL Modem. You will hear a "click" when the DSL Cable has been connected properly.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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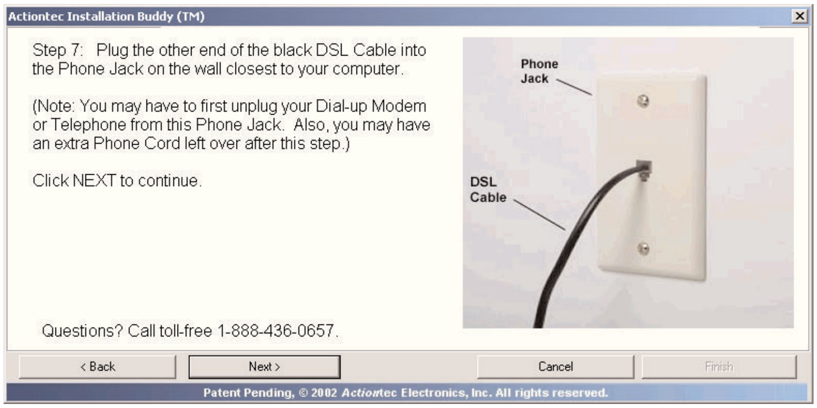
11. When the next window appears, plug the other end of the **Black DSL Cable** into the **Phone Jack** nearest to the computer, then click **Next**.


Actiontec Installation Buddy (TM)
Phone Jack
DSL Cable
< Back
Next >
Cancel
Finish

Step 7: Plug the other end of the black DSL Cable into the Phone Jack on the wall closest to your computer.

(Note: You may have to first unplug your Dial-up Modem or Telephone from this Phone Jack. Also, you may have an extra Phone Cord left over after this step.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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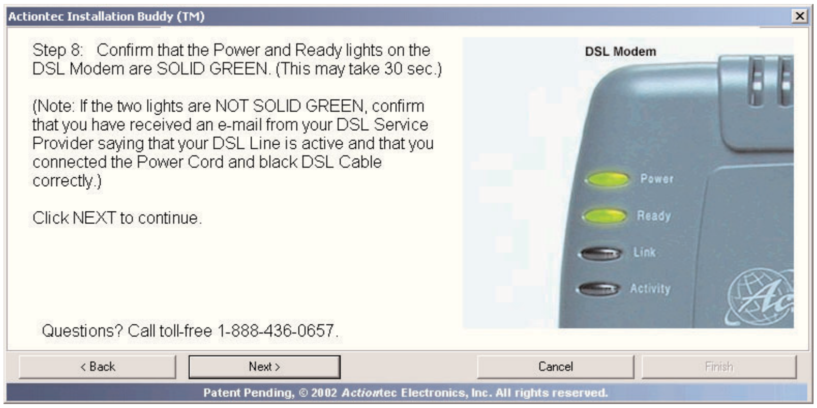
12. When the next window appears, confirm the **Power** and **Ready Lights** on the Modem **glow steadily green**. This may take up to 30 seconds. Click **Next**.


Actiontec Installation Buddy (TM)
DSL Modem
Power
Ready
Link
Activity
< Back
Next >
Cancel
Finish

Step 8: Confirm that the Power and Ready lights on the DSL Modem are SOLID GREEN. (This may take 30 sec.)

(Note: If the two lights are NOT SOLID GREEN, confirm that you have received an e-mail from your DSL Service Provider saying that your DSL Line is active and that you connected the Power Cord and black DSL Cable correctly.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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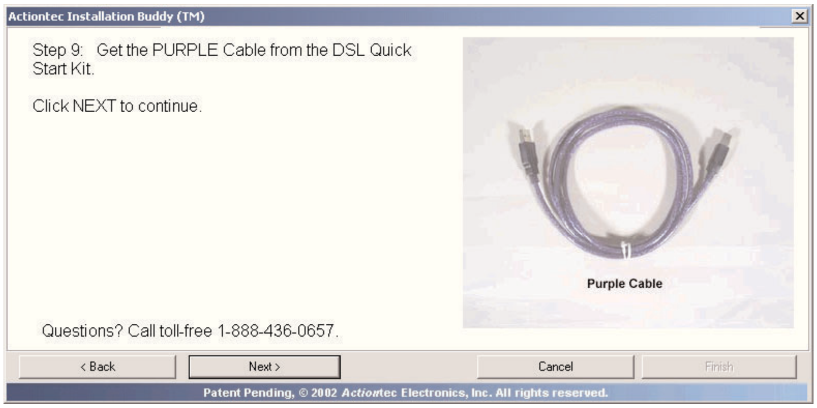
☞ ***Note***: If the Power and Ready Lights on the Modem are not solid green, confirm your DSL service provider has activated the DSL line, and check all connections to the Modem.

13. The following window appears. Get the **Purple (USB) Cable** from the DSL Quick Start Kit, then click **Next**.


Actiontec Installation Buddy (TM)
Purple Cable
< Back
Next >
Cancel
Finish

Step 9: Get the PURPLE Cable from the DSL Quick Start Kit.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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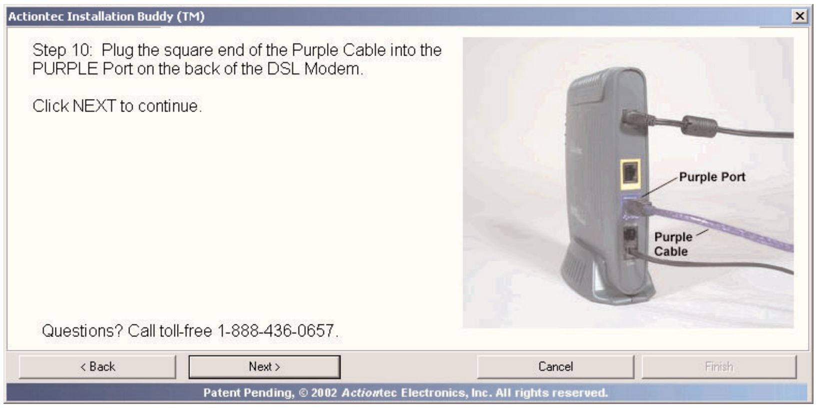
14. When the next window appears, plug the square end of the **Purple** (**USB**) **Cable** into the **Purple Port** on the back of the Modem, then click **Next**.

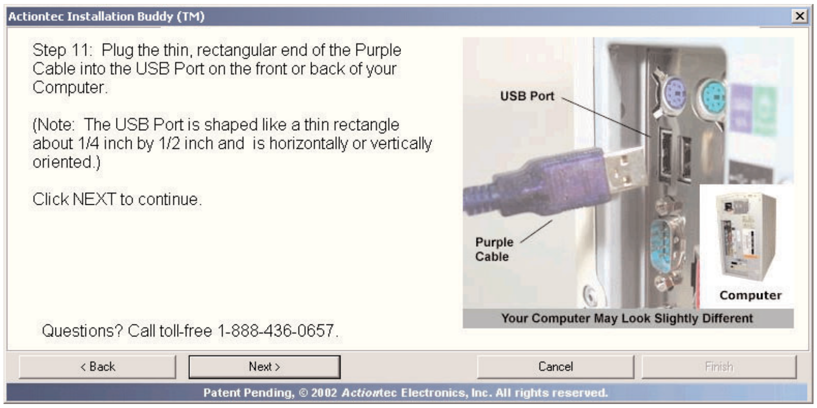

Actiontec Installation Buddy (TM)
Purple Port
Purple Cable
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 10: Plug the square end of the Purple Cable into the PURPLE Port on the back of the DSL Modem.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

15. Another window appears. Plug the rectangular end of the **Purple** (**USB**) **Cable** into a **USB port** on the front or back of the computer, then click **Next**.


Actiontec Installation Buddy (TM)
USB Port
Purple Cable
Computer
Your Computer May Look Slightly Different
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 11: Plug the thin, rectangular end of the Purple Cable into the USB Port on the front or back of your Computer.

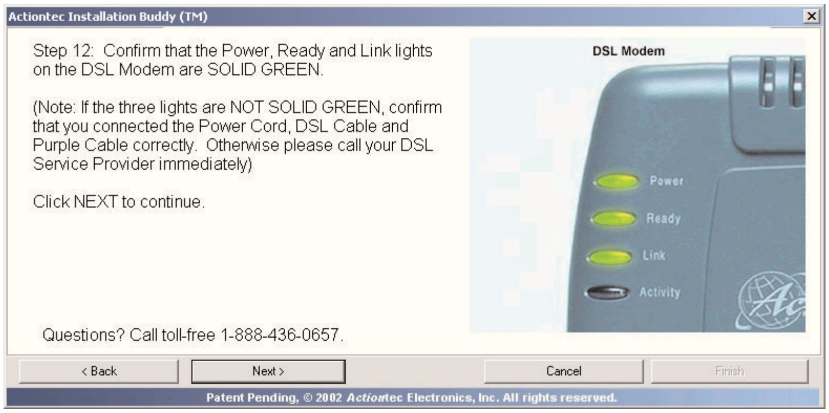
(Note: The USB Port is shaped like a thin rectangle about 1/4 inch by 1/2 inch and is horizontally or vertically oriented.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

☞ ***Note***: A USB port is shaped like a thin rectangle about 1/4 inch by 1/2 inch, and may be vertically or horizontally oriented.

16. When the next window appears, confirm the **Power**, **Ready**, and **Link Lights** on the Modem **glow steadily green**. Click **Next**.


Actiontec Installation Buddy (TM)
DSL Modem
Power
Ready
Link
Activity
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 12: Confirm that the Power, Ready and Link lights on the DSL Modem are SOLID GREEN.

(Note: If the three lights are NOT SOLID GREEN, confirm that you connected the Power Cord, DSL Cable and Purple Cable correctly. Otherwise please call your DSL Service Provider immediately)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

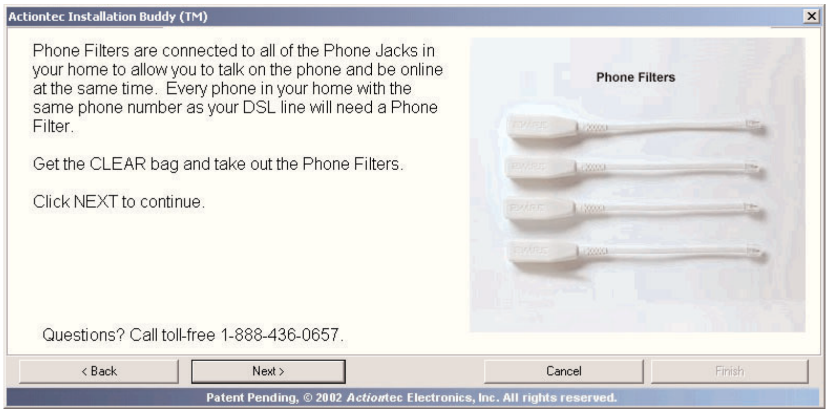
Note: If the Power, Ready and Link Lights on the Modem are not solid green, check all connections to the Modem. If all connections are plugged in properly, call your DSL service provider.

The Modem is connected to a computer via USB. Next, install the phone filters as described in "Installing the Phone Filters" on page 17.

Installing Filters

Filters allow the user to use the phone while online. All phones and other devices (answering machines, fax machines, etc.) using the same line (i.e., using the same phone number) as the DSL line must have a filter installed. To install a filter, follow these instructions:

1. When the following window appears, get the **Clear Bag** from the DSL Quick Start Kit and take out the **Filters**. Click **Next** to continue.


Actiontec Installation Buddy (TM)
Phone Filters
< Back
Next >
Cancel
Finish

Phone Filters are connected to all of the Phone Jacks in your home to allow you to talk on the phone and be online at the same time. Every phone in your home with the same phone number as your DSL line will need a Phone Filter.

Get the CLEAR bag and take out the Phone Filters.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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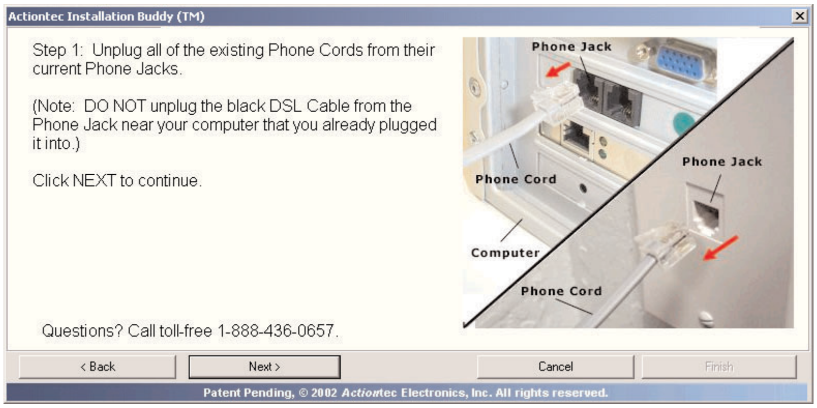
2. When the next window appears, unplug all phone cords from their respective phone jacks, then click **Next**.


Actiontec Installation Buddy (TM)
Phone Jack
Phone Cord
Phone Jack
Computer
Phone Cord
< Back
Next >
Cancel
Finish

Step 1: Unplug all of the existing Phone Cords from their current Phone Jacks.

(Note: DO NOT unplug the black DSL Cable from the Phone Jack near your computer that you already plugged it into.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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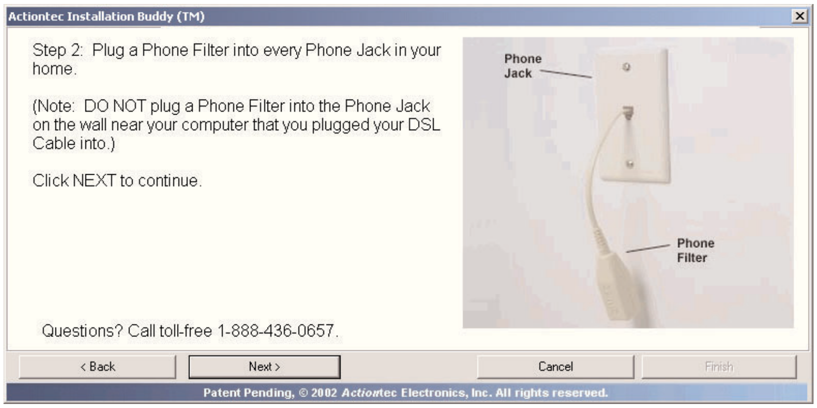
Caution: **Do not** unplug the black DSL cable from the phone jack near your computer.

3. Plug a **filter** in every phone jack using the same number as the DSL line, then click **Next**.


Actiontec Installation Buddy (TM)
Phone Jack
Phone Filter
< Back
Next >
Cancel
Finish

Step 2: Plug a Phone Filter into every Phone Jack in your home.

(Note: DO NOT plug a Phone Filter into the Phone Jack on the wall near your computer that you plugged your DSL Cable into.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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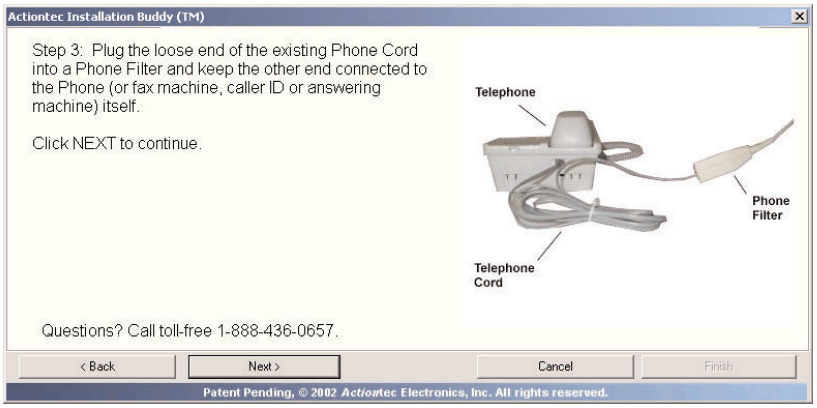
***Caution*: Do not** install a filter in the phone jack used by the black DSL cable.

4. In the next window, read the instructions. Plug the loose end of the existing phone cord into a filter, keeping the other end connected to the device (phone, fax machine, answering machine, etc.). Click **Next**.


Actiontec Installation Buddy (TM)
Telephone
Phone Filter
Telephone Cord
< Back
Next >
Cancel
Finish

Step 3: Plug the loose end of the existing Phone Cord into a Phone Filter and keep the other end connected to the Phone (or fax machine, caller ID or answering machine) itself.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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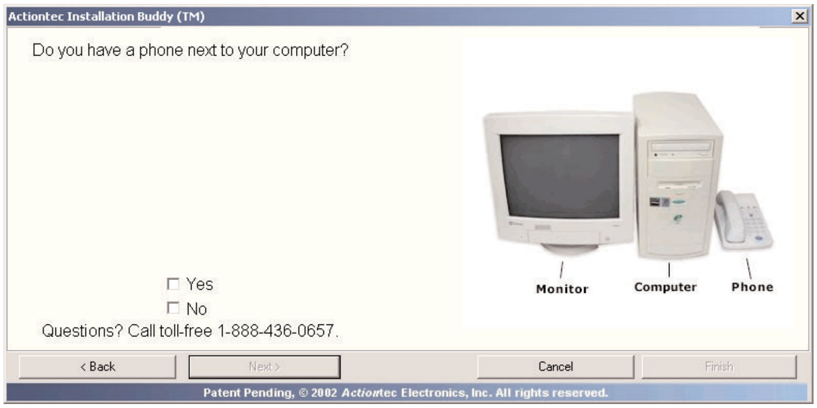
5. Answer the question ("Do you have a phone next to your computer?") in the following window by clicking **Yes** or **No**, then click **Next**.


Actiontec Installation Buddy (TM)
Monitor
Computer
Phone
< Back
Next >
Cancel
Finish

Do you have a phone next to your computer?

☐ Yes
☐ No

Questions? Call toll-free 1-888-436-0657.

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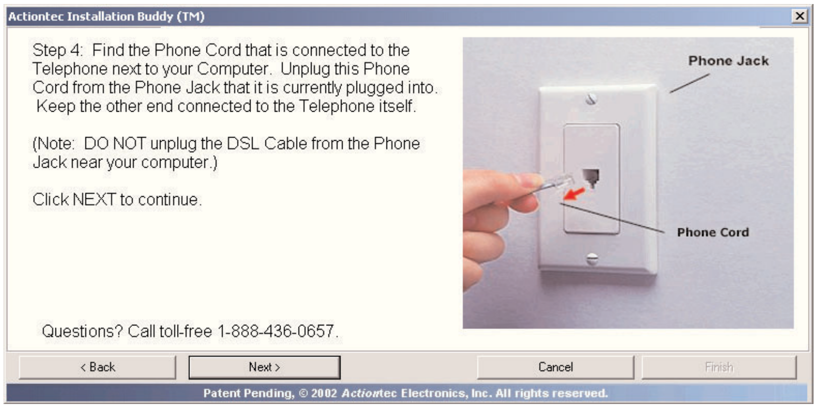
6. If you answered “No” in the previous window, go to “Setting up the DSL Connection” on page XX. If you answered “Yes,” the following window appears. Unplug the phone cord connected to the phone from its phone jack in the wall, the click **Next**.


Actiontec Installation Buddy (TM)
Phone Jack
Phone Cord
< Back
Next >
Cancel
Finish
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Step 4: Find the Phone Cord that is connected to the Telephone next to your Computer. Unplug this Phone Cord from the Phone Jack that it is currently plugged into. Keep the other end connected to the Telephone itself.

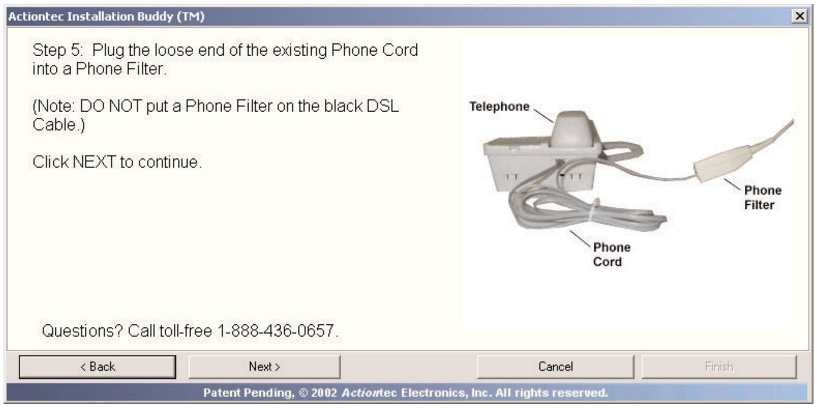
(Note: DO NOT unplug the DSL Cable from the Phone Jack near your computer.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

Caution: **Do not** unplug the black DSL cable from the phone jack near your computer.

7. When the next window appears, plug the loose end of the phone cord into a filter.


Actiontec Installation Buddy (TM)
Telephone
Phone Filter
Phone Cord
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 5: Plug the loose end of the existing Phone Cord into a Phone Filter.

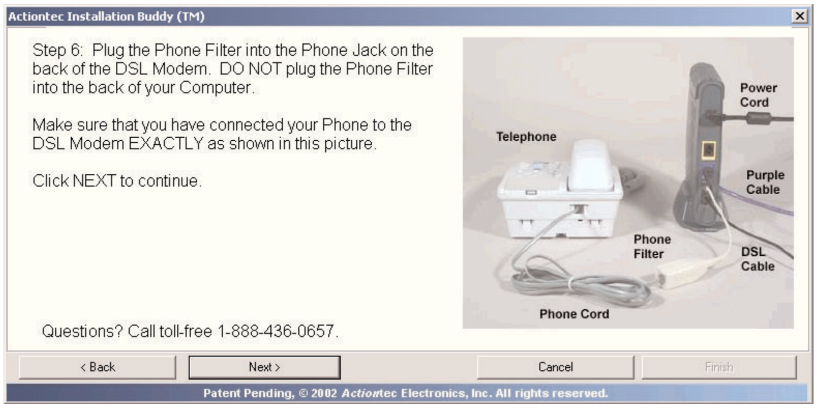
(Note: DO NOT put a Phone Filter on the black DSL Cable.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

Caution: **Do not** connect a phone filter to the black DSL cable.

8. The next window appears. Plug the phone filter into the Phone Jack on the back of the Modem. Do no plug the phone filter into the phone jack on the back of the computer. Your connections should look exactly as the configuration in the picture, below. Click **Next**.


Actiontec Installation Buddy (TM)
Telephone
Power Cord
Purple Cable
Phone Filter
DSL Cable
Phone Cord
< Back
Next >
Cancel
Finish

Step 6: Plug the Phone Filter into the Phone Jack on the back of the DSL Modem. DO NOT plug the Phone Filter into the back of your Computer.

Make sure that you have connected your Phone to the DSL Modem EXACTLY as shown in this picture.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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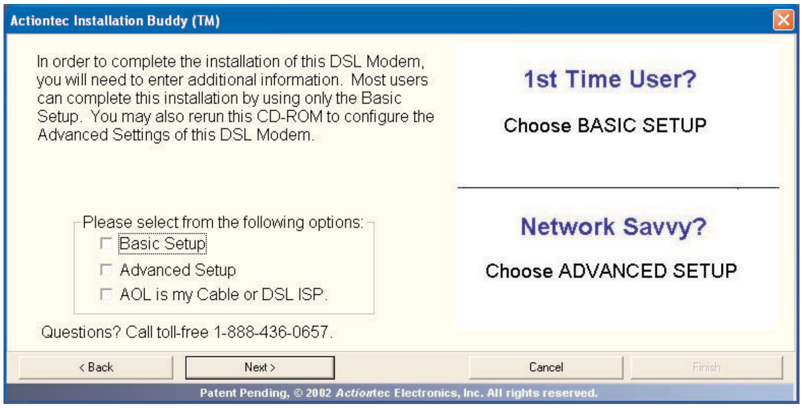
Setting Up the DSL Connection

After connection the Modem and installing phone filters, the DSL connection must be configured. When the following window appears, read the instructions and select the type of setup.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

In order to complete the installation of this DSL Modem, you will need to enter additional information. Most users can complete this installation by using only the Basic Setup. You may also rerun this CD-ROM to configure the Advanced Settings of this DSL Modem.

Please select from the following options:
☐ Basic Setup
☐ Advanced Setup
☐ AOL is my Cable or DSL ISP.

Questions? Call toll-free 1-888-436-0657.

1st Time User?
Choose BASIC SETUP

Network Savvy?
Choose ADVANCED SETUP

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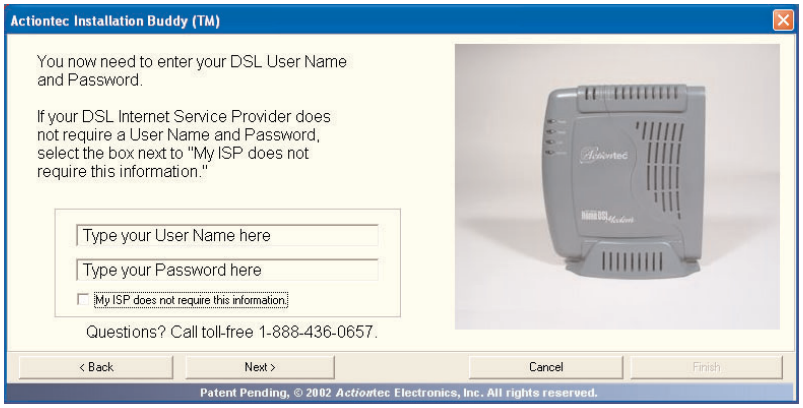
Basic Setup

1. If "Basic Setup" was chosen, the following window appears. Enter the appropriate user name and password in the text boxes. If no user name and password are needed, click on the check box next to "My ISP does not require this information." Click **Next**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

You now need to enter your DSL User Name and Password.

If your DSL Internet Service Provider does not require a User Name and Password, select the box next to "My ISP does not require this information."

Type your User Name here

Type your Password here

☐ My ISP does not require this information.

Questions? Call toll-free 1-888-436-0657.

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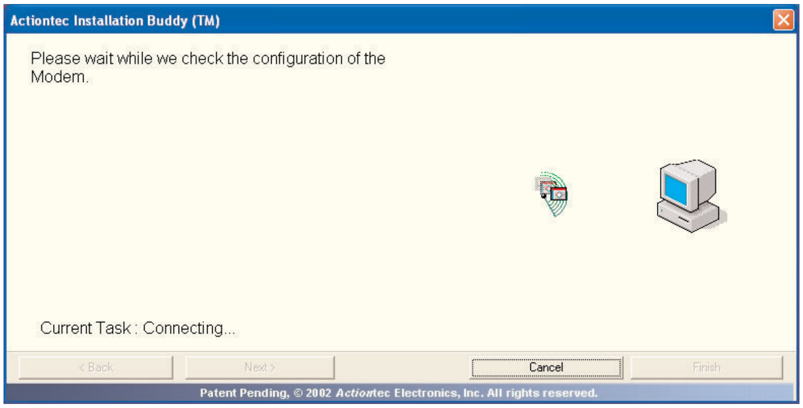
2. The next window appears, and then a prompt requesting the user to restart the computer will appear. Select **Yes**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

Please wait while we check the configuration of the Modem.

Current Task : Connecting...

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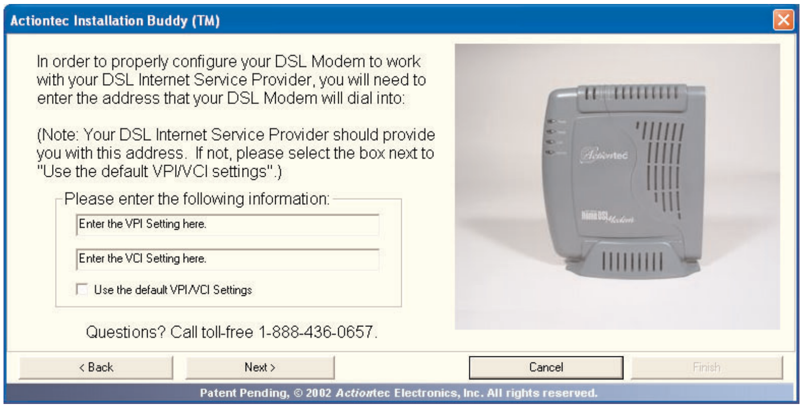
3. When the computer has rebooted, the Modem is properly set up.

Advanced Setup

1. If "Advanced Setup" was chosen, enter the VPI and VCI settings in their appropriate boxes (if provided by the DSL service provider). If not provided with these settings, click the "Use the default VPI/VCI Settings" check box, then click **Next**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

In order to properly configure your DSL Modem to work with your DSL Internet Service Provider, you will need to enter the address that your DSL Modem will dial into:

(Note: Your DSL Internet Service Provider should provide you with this address. If not, please select the box next to "Use the default VPI/VCI settings".)

Please enter the following information:

Enter the VPI Setting here.

Enter the VCI Setting here.

☐ Use the default VPI/VCI Settings

Questions? Call toll-free 1-888-436-0657.

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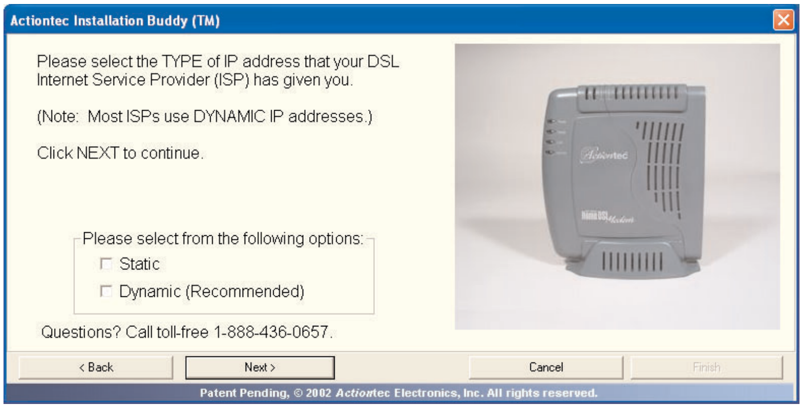
2. The next windodow appears. Select the type of IP address used by the DSL service provider. Click **Next**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

Please select the TYPE of IP address that your DSL Internet Service Provider (ISP) has given you.

(Note: Most ISPs use DYNAMIC IP addresses.)

Click NEXT to continue.

Please select from the following options:

☐ Static

☐ Dynamic (Recommended)

Questions? Call toll-free 1-888-436-0657.

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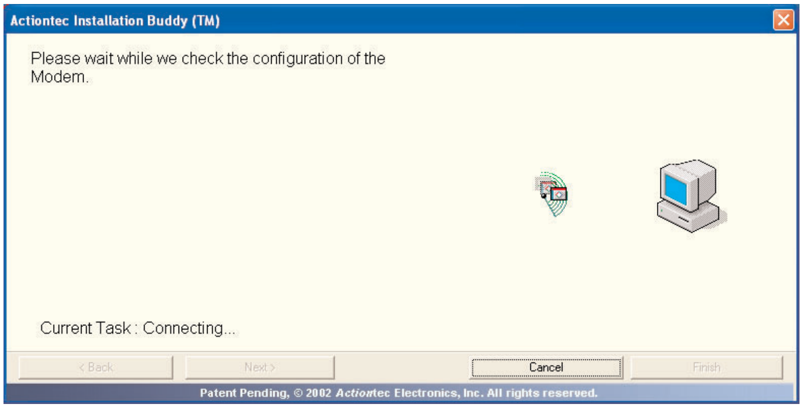
3. The next window appears, and then a prompt requesting the user to restart the computer will appear. Select **Yes**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

Please wait while we check the configuration of the Modem.

Current Task : Connecting...

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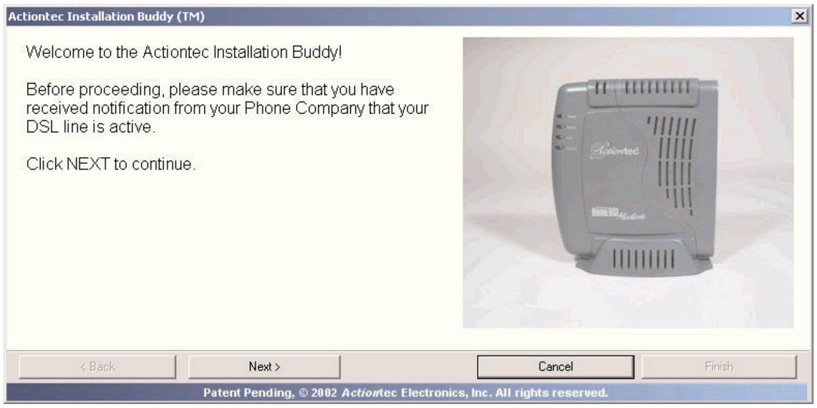
4. When the computer has rebooted, the Modem is properly set up.

Connecting Additional Computers

Connecting Via Ethernet

1. Insert **Disk 1** (Installation Buddy CD) in the CD-ROM drive of the computer. The Installaton Buddy will start automatically. Wait until the following screen appears, read the onscreen instructions, then click **Next**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

Welcome to the Actiontec Installation Buddy!

Before proceeding, please make sure that you have received notification from your Phone Company that your DSL line is active.

Click NEXT to continue.

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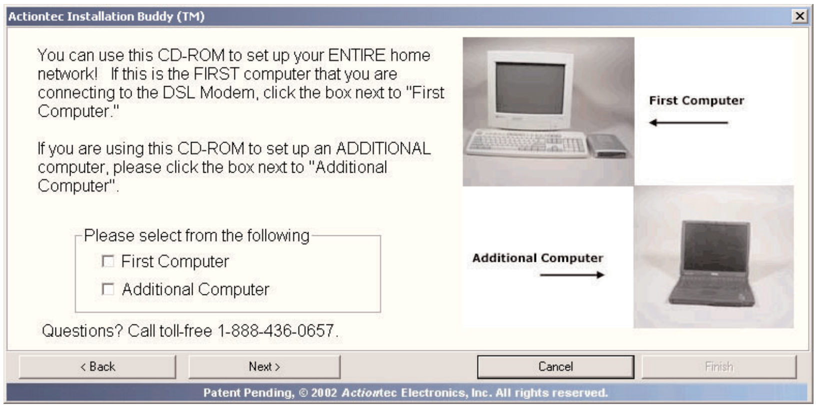
2. The next window appears. Read the instructions, select **Addtional Computer** by clicking on the check box, then click **Next**.


Actiontec Installation Buddy (TM)
First Computer
Additional Computer
< Back
Next >
Cancel
Finish

You can use this CD-ROM to set up your ENTIRE home network! If this is the FIRST computer that you are connecting to the DSL Modem, click the box next to "First Computer."

If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".

Please select from the following

☐ First Computer

☐ Additional Computer

Questions? Call toll-free 1-888-436-0657.

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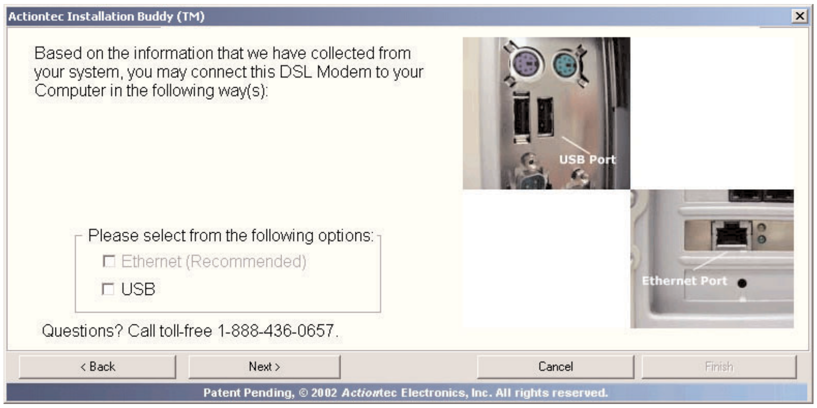
3. In the next window, select **Ethernet**, then click **Next**.



Actiontec Installation Buddy (TM)

Based on the information that we have collected from your system, you may connect this DSL Modem to your Computer in the following way(s):

Please select from the following options:

☐ Ethernet (Recommended)

☐ USB

Questions? Call toll-free 1-888-436-0657.

USB Port
Ethernet Port
< Back
Next >
Cancel
Finish
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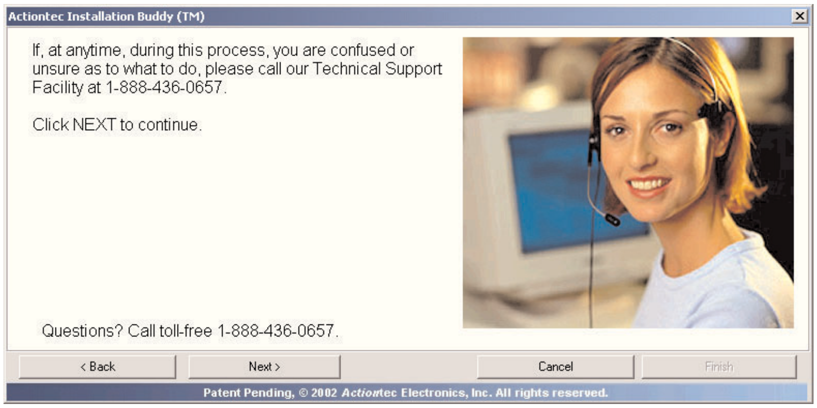
4. The next window appears, with information regarding *Action*tec's 24-hour, 7-day-a-week Technical Support. If you have any problems, call **1.888.436.0657**. Click **Next**.



Actiontec Installation Buddy (TM)

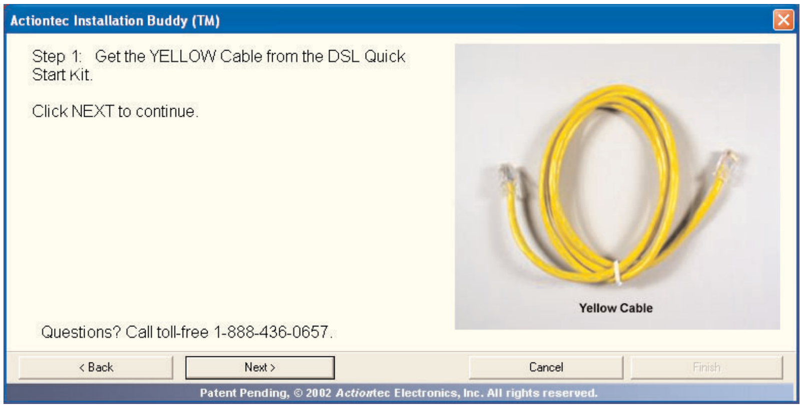
If, at anytime, during this process, you are confused or unsure as to what to do, please call our Technical Support Facility at 1-888-436-0657.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

5. The following window appears. Get the **Yellow (Ethernet) Cable** from the DSL Quick Start Kit, then click **Next**.



Actiontec Installation Buddy (TM)

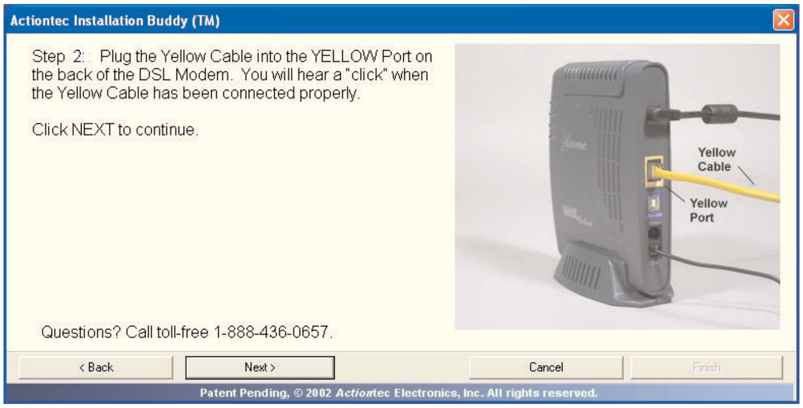
Step 1: Get the YELLOW Cable from the DSL Quick Start Kit.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

Yellow Cable
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

6. When the next window appears, plug one end of the **Yellow (Ethernet) Cable** into the **Yellow Port** on the back of the Modem, then click **Next**.


Actiontec Installation Buddy (TM)
Yellow Cable
Yellow Port
< Back
Next >
Cancel
Finish

Step 2: Plug the Yellow Cable into the YELLOW Port on the back of the DSL Modem. You will hear a "click" when the Yellow Cable has been connected properly.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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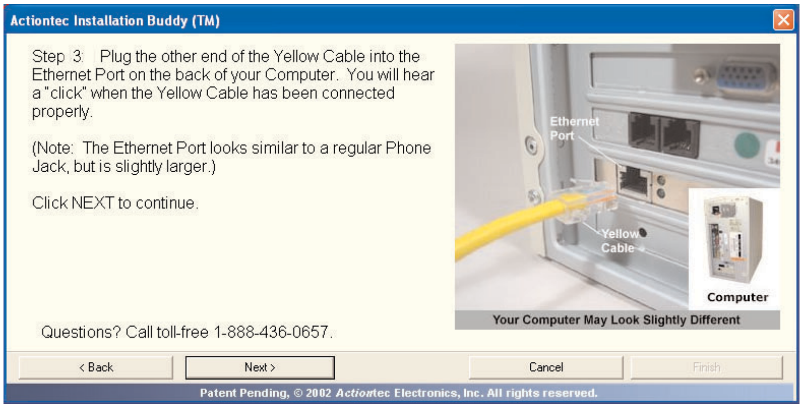
7. Another window appears. Plug the other end of the **Yellow (Ethernet) Cable** into an **Ethernet port** on the back of the computer, then click **Next**.


Actiontec Installation Buddy (TM)
Ethernet Port
Yellow Cable
Computer
Your Computer May Look Slightly Different
< Back
Next >
Cancel
Finish

Step 3: Plug the other end of the Yellow Cable into the Ethernet Port on the back of your Computer. You will hear a "click" when the Yellow Cable has been connected properly.

(Note: The Ethernet Port looks similar to a regular Phone Jack, but is slightly larger.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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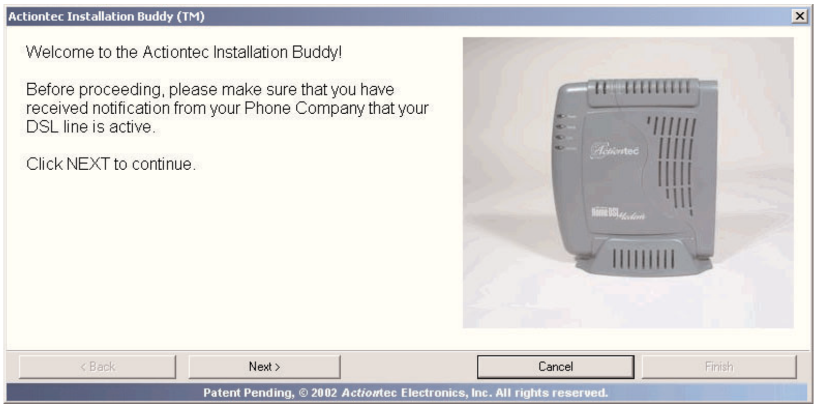
☞ ***Note***: An Ethernet port looks similar to a phone port, but is slightly bigger.

The Modem is connected to a computer via Ethernet.

Connecting Via USB

1. Insert **Disk 1** (Installation Buddy CD) in the CD-ROM drive of the computer. The Installaton Buddy will start automatically. Wait until the following screen appears, read the onscreen instructions, then click **Next**.



Actiontec Installation Buddy (TM)

Welcome to the Actiontec Installation Buddy!

Before proceeding, please make sure that you have received notification from your Phone Company that your DSL line is active.

Click NEXT to continue.

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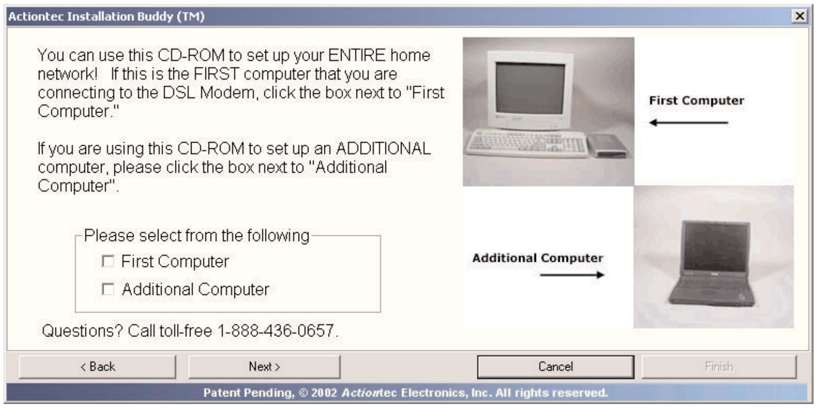
2. The next window appears. Read the instructions, select **Additional Computer** by clicking on the check box, then click **Next**.



Actiontec Installation Buddy (TM)

You can use this CD-ROM to set up your ENTIRE home network! If this is the FIRST computer that you are connecting to the DSL Modem, click the box next to "First Computer."

If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".

Please select from the following

☐ First Computer

☐ Additional Computer

Questions? Call toll-free 1-888-436-0657.

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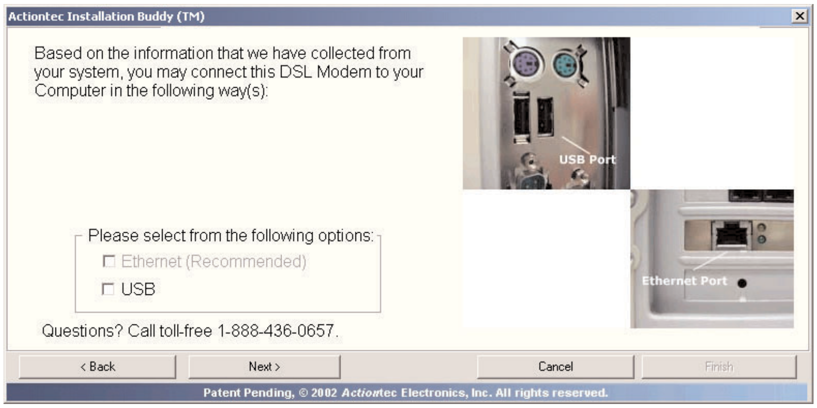
3. In the next window, select **USB**, then click **Next**.



Actiontec Installation Buddy (TM)

Based on the information that we have collected from your system, you may connect this DSL Modem to your Computer in the following way(s):

Please select from the following options:

☐ Ethernet (Recommended)

☐ USB

Questions? Call toll-free 1-888-436-0657.

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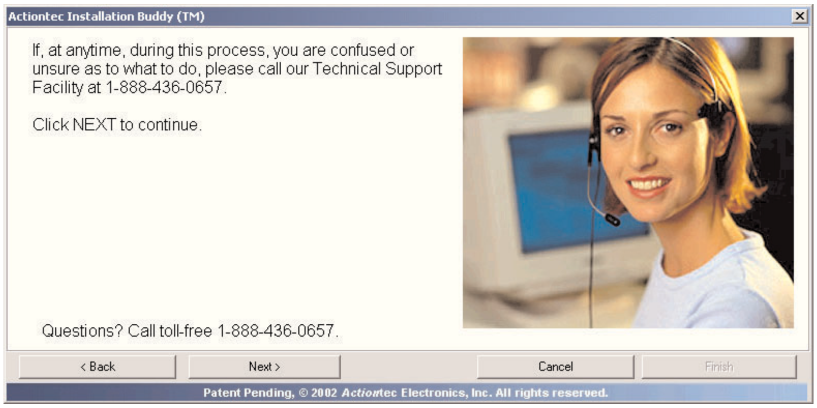
4. The next window appears, with information regarding *Action*tec's 24-hour, 7-day-a-week Technical Support. If you have any problems, call **1.888.436.0657**. Click **Next**.


Actiontec Installation Buddy (TM)
< Back
Next >
Cancel
Finish

If, at anytime, during this process, you are confused or unsure as to what to do, please call our Technical Support Facility at 1-888-436-0657.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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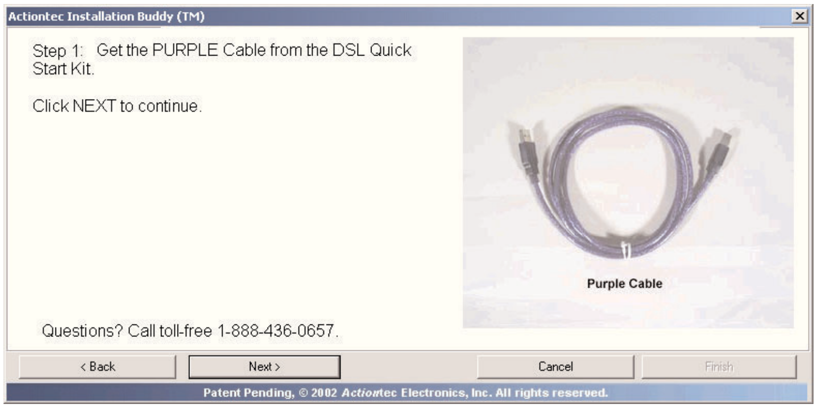
5. The following window appears. Get the **Purple (USB) Cable** from the DSL Quick Start Kit, then click **Next.**


Actiontec Installation Buddy (TM)
Purple Cable
< Back
Next >
Cancel
Finish

Step 1: Get the PURPLE Cable from the DSL Quick Start Kit.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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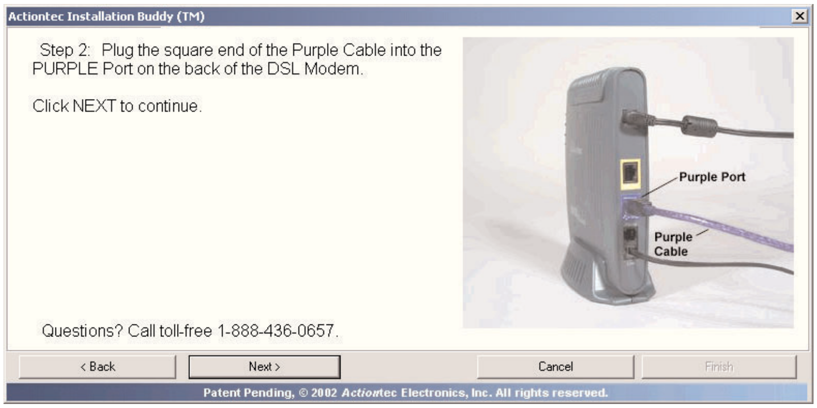
6. When the next window appears, plug square end of the **Purple (USB) Cable** into the **Purple Port** on the back of the Modem, then click **Next**.


Actiontec Installation Buddy (TM)
Purple Port
Purple Cable
< Back
Next >
Cancel
Finish

Step 2: Plug the square end of the Purple Cable into the PURPLE Port on the back of the DSL Modem.

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

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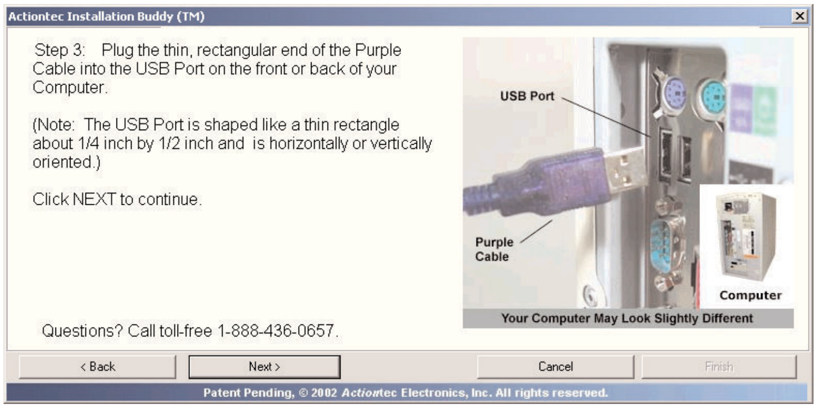
7. Another window appears. Plug the rectangular end of the **Purple (USB) Cable** into a **USB port** on the front or back of the computer, then click **Next**.


Actiontec Installation Buddy (TM)
USB Port
Purple Cable
Computer
Your Computer May Look Slightly Different
< Back
Next >
Cancel
Finish
Patent Pending, © 2002 Actiontec Electronics, Inc. All rights reserved.

Step 3: Plug the thin, rectangular end of the Purple Cable into the USB Port on the front or back of your Computer.

(Note: The USB Port is shaped like a thin rectangle about 1/4 inch by 1/2 inch and is horizontally or vertically oriented.)

Click NEXT to continue.

Questions? Call toll-free 1-888-436-0657.

☞ ***Note***: A USB port is shaped like a thin rectangle about 1/4 inch by 1/2 inch, and may be vertically or horizontally oriented.

The Modem is connected to a computer via USB.

Using Advanced Settings

3

This chapter contains information regarding the advanced settings of the Modem, including WAN IP address options, port forwarding, and DMZ hosting.

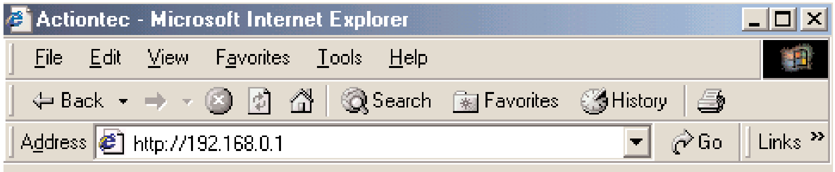
Accessing Advanced Settings

To access the advanced settings of the Modem:

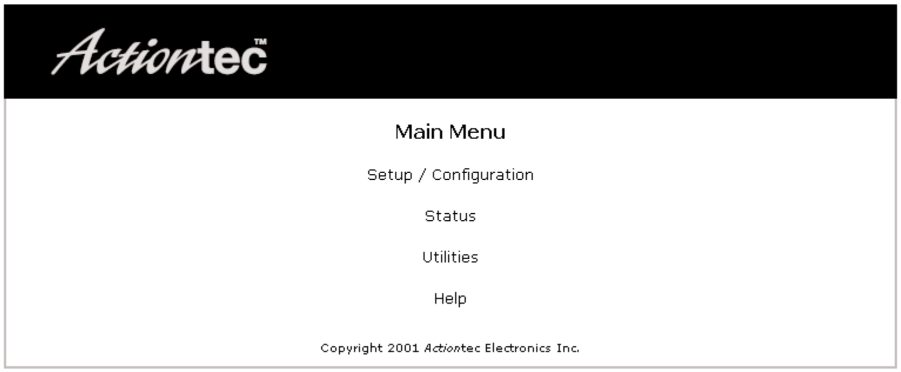
1. Open your Web browser. In the address bar type

`http://192.168.0.1`

then press <**Enter**> on your keyboard.

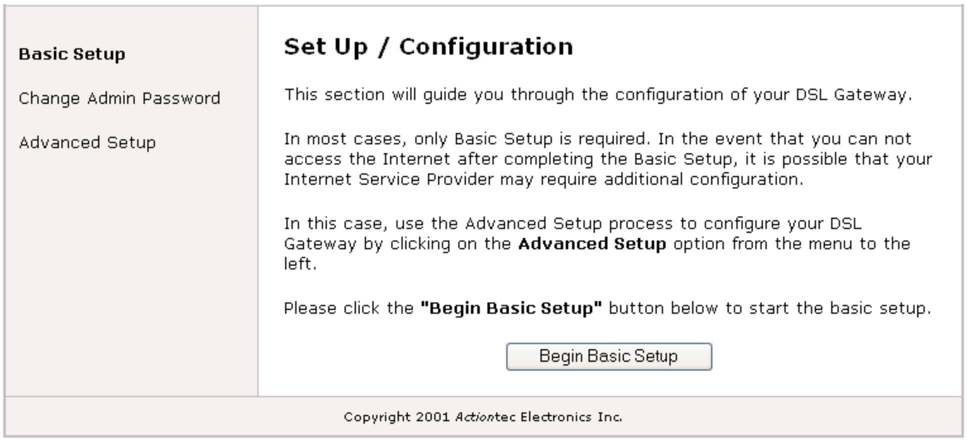

Actiontec - Microsoft Internet Explorer
File
Edit
View
Favorites
Tools
Help
Back
Search
Favorites
History
Address
http://192.168.0.1
Go
Links

2. The "Main Menu" screen appears. Select **Setup/Configuration**.


Actiontec
Main Menu
Setup / Configuration
Status
Utilities
Help

Copyright 2001 Actiontec Electronics Inc.

3. The "Setup/Configuration" screen appears. Select **Advanced Setup** from the menu on the left.



Set Up / Configuration

This section will guide you through the configuration of your DSL Gateway.

In most cases, only Basic Setup is required. In the event that you can not access the Internet after completing the Basic Setup, it is possible that your Internet Service Provider may require additional configuration.

In this case, use the Advanced Setup process to configure your DSL Gateway by clicking on the **Advanced Setup** option from the menu to the left.

Please click the **"Begin Basic Setup"** button below to start the basic setup.

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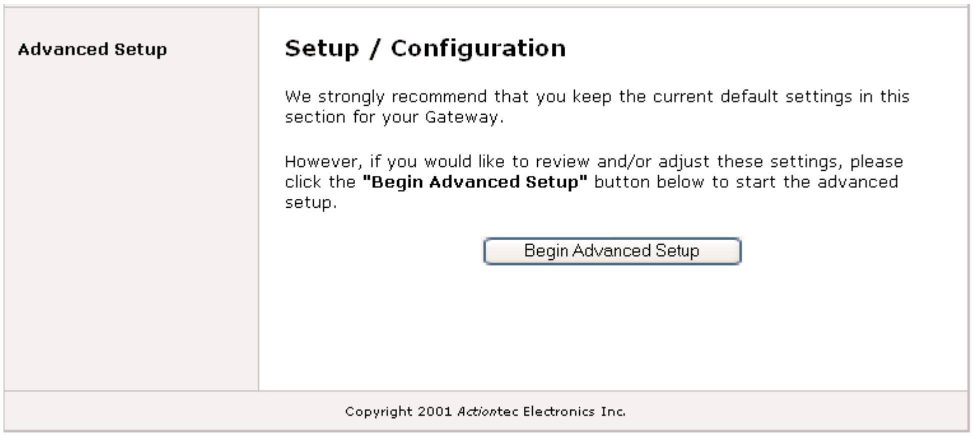
3. The following window appears. Click **Begin Advanced Setup**.



Setup / Configuration

We strongly recommend that you keep the current default settings in this section for your Gateway.

However, if you would like to review and/or adjust these settings, please click the **"Begin Advanced Setup"** button below to start the advanced setup.

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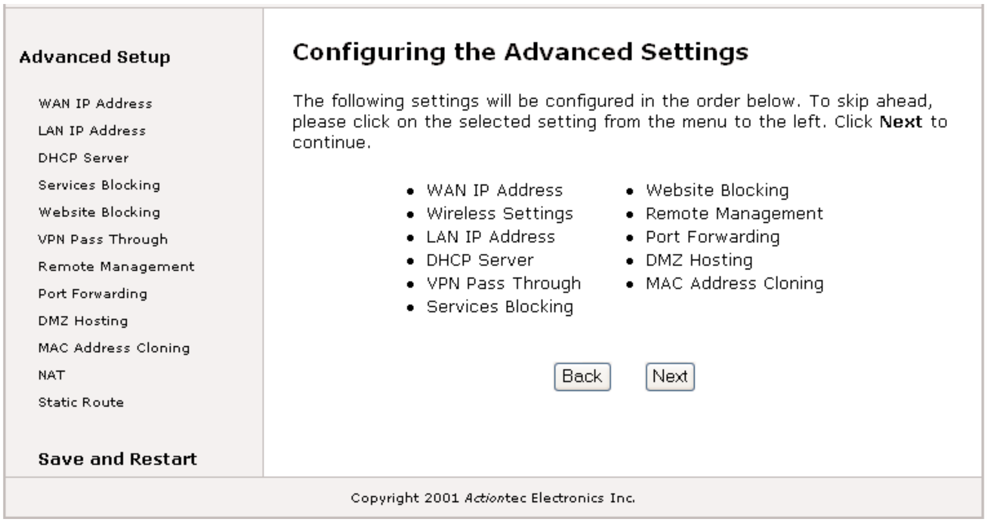
3. The “Configuring the Advanced Settings” screen appears. Choose the setting to be changed from the menu on the left, or click **Next** to go to the “WAN IP Address” screen.


Advanced Setup
WAN IP Address
LAN IP Address
DHCP Server
Services Blocking
Website Blocking
VPN Pass Through
Remote Management
Port Forwarding
DMZ Hosting
MAC Address Cloning
NAT
Static Route
Save and Restart
Back
Next
Copyright 2001 Actiontec Electronics Inc.

Configuring the Advanced Settings

The following settings will be configured in the order below. To skip ahead, please click on the selected setting from the menu to the left. Click **Next** to continue.

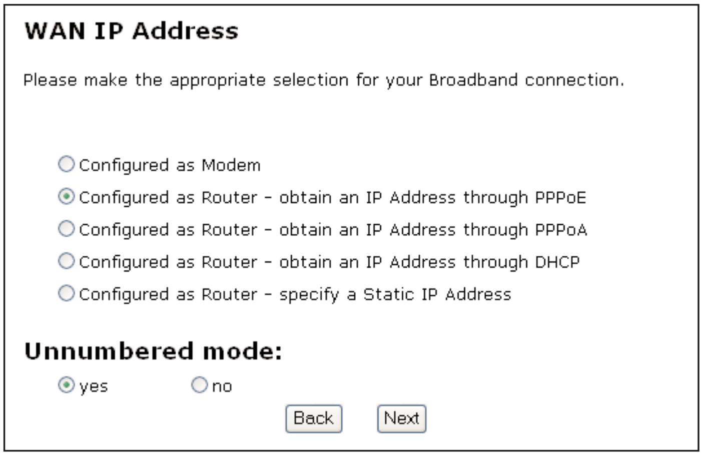
- WAN IP Address
- Wireless Settings
- LAN IP Address
- DHCP Server
- VPN Pass Through
- Services Blocking
- Website Blocking
- Remote Management
- Port Forwarding
- DMZ Hosting
- MAC Address Cloning

WAN IP Address

Selecting **WAN IP Address** in the “Configuring the Advanced Settings” screen generates the “WAN IP Address” screen. WAN IP Address allows manual set up of the broadband connection of the Modem. There are five options: Configured as a Modem, Configured as a Router - obtain an IP Address through PPPoE, Configured as a Router - obtain an IP Address through PPPoA, Configured as a Router - obtain an IP Address through DHCP Obtain an IP Address Through DHCP, and Specify a Static IP Address.

Note: Some DSL providers use PPPoE to establish communication with an end user, while others use static IP. Cable modem providers and other types of broadband Internet connections (such as fixed point wireless) may use either DHCP or Static IP address. If unsure about which connection is present, check with the ISP before continuing.

After selecting a connection type, click **Next** to continue configuring the connection.



WAN IP Address

Please make the appropriate selection for your Broadband connection.

○ Configured as Modem
● Configured as Router - obtain an IP Address through PPPoE
○ Configured as Router - obtain an IP Address through PPPoA
○ Configured as Router - obtain an IP Address through DHCP
○ Configured as Router - specify a Static IP Address

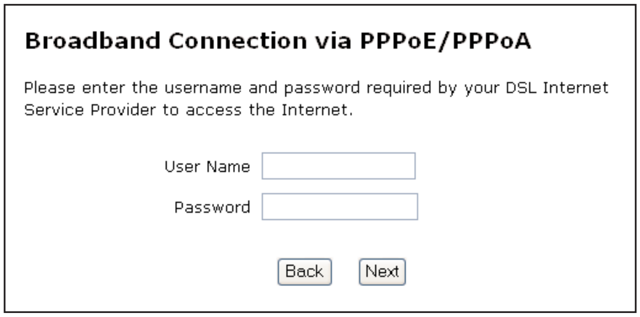
Unnumbered mode:
● yes ○ no

Configured as a Modem

Select this option to use the Modem as a modem, connected to a single computer.

Configured as a Router - Obtain an IP Address through PPPoE or PPPoA

Select one of these options to allow the Modem to use the Point-to-Point over Ethernet (PPPoE) or Point-to-Point over ATM (PPPoA) protocol.



Broadband Connection via PPPoE/PPPoA

Please enter the username and password required by your DSL Internet Service Provider to access the Internet.

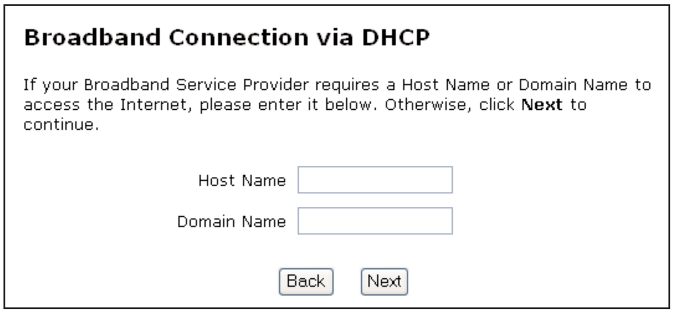
User Name
Password

If a **User Name** and **Password** was entered during the Installation Buddy, it should be displayed in the "Broadband Connection via PPPoE/PPPoA" screen. If not, enter the information now. If the information is unavailable, contact the ISP.

Configured as a Router - Obtain an IP through DHCP

Select this option (used for cable modem configurations without a Static IP assigned by an ISP) to allow the Modem to query the ISP and receive IP address and routing information. Some ISPs need to authenticate their end users with a **Host Name** and/or **Domain Name**. If this is the case, check with the ISP for a host name and domain name and enter them in the "Broadband Connection via DHCP" screen. If the ISP does not require these settings, leave the text boxes blank.

☞ ***Note***: Host and domain name information may also be accessed from the computer originally connected to the cable modem.

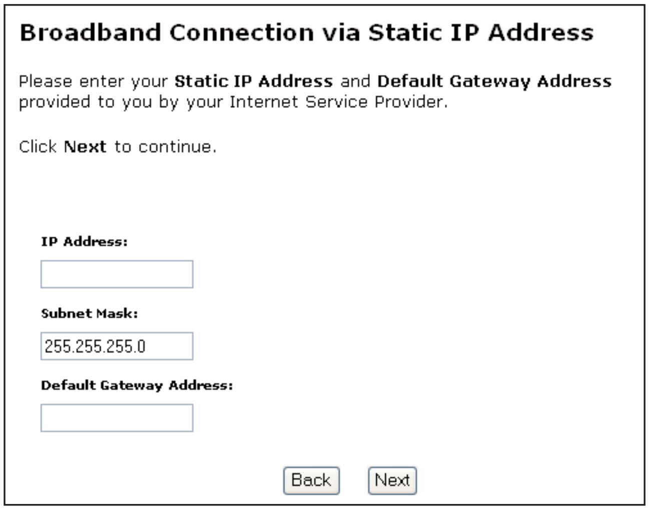


Broadband Connection via DHCP

If your Broadband Service Provider requires a Host Name or Domain Name to access the Internet, please enter it below. Otherwise, click **Next** to continue.

Configured as a Router - Specify a Static IP Address

Select this option if assigned a static (specific) IP Address by the ISP. Enter the **IP Address**, along with the **Subnet Mask** and **Default Gateway Address** (also provided by the ISP), in the "Broadband Connection via Static IP Address" screen.



Broadband Connection via Static IP Address

Please enter your **Static IP Address** and **Default Gateway Address** provided to you by your Internet Service Provider.

Click **Next** to continue.

IP Address:

Subnet Mask: 255.255.255.0

Default Gateway Address:

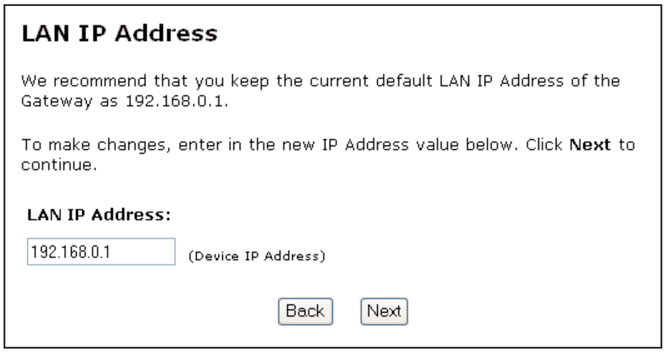
Unnumbered Mode

To allow your home network to be available to outside users using a specific IP address only, click **Yes** under "Unnumbered mode." Unnumbered mode can only be used in conjunction with PPP connections (PPPoE or PPPoA).

LAN IP Address

Selecting **LAN IP Address** in the “Configuring the Advanced Settings” screen generates the “LAN IP Address” screen. The value in the **LAN IP Address** text box is the IP address of the Modem as seen on the network.
The LAN IP address of the Modem can be modified, but *Action*tec recommends keeping the default factory setting (192.168.0.1).

Note: If the Modem’s LAN IP Address is modified, verify the DHCP Server range is within the same subnet. For more information, see “DHCP Server Configuration.”



LAN IP Address

We recommend that you keep the current default LAN IP Address of the Gateway as 192.168.0.1.

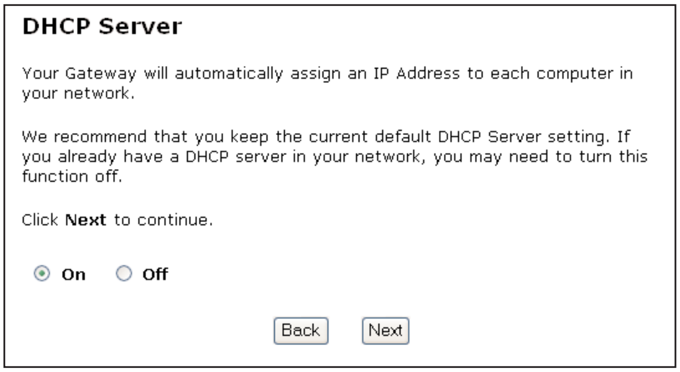
To make changes, enter in the new IP Address value below. Click **Next** to continue.

LAN IP Address:

192.168.0.1 (Device IP Address)

DHCP Server

Selecting **DHCP Server** in the “Configuring the Advanced Settings” screen generates the “DHCP Server” screen. The Modem has a built-in DHCP (Dynamic Host Configuration Protocol) server that automatically assigns a different IP address to each computer on your network, eliminating IP address conflicts.
The factory default setting is **On**. To disable the DHCP Server, select **Off**.



DHCP Server

Your Gateway will automatically assign an IP Address to each computer in your network.

We recommend that you keep the current default DHCP Server setting. If you already have a DHCP server in your network, you may need to turn this function off.

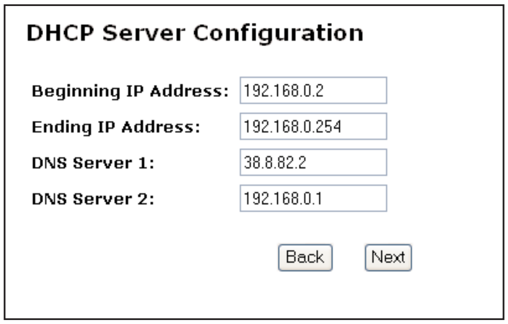
Click **Next** to continue.

● **On** ○ **Off**

*Action*tec strongly recommends leaving the DHCP Server option **On**. If the DHCP Server option is **Off**, ensure the IP addresses of the networked computers are on the same subnet as the IP address of the Modem. For more information, see “DHCP Server Configuration” below.

DHCP Server Configuration

Clicking **Next** in the "DHCP Server" screen generates the "DHCP Server Configuration" screen. Change IP address range and DNS server information here.



DHCP Server Configuration

Beginning IP Address: 192.168.0.2

Ending IP Address: 192.168.0.254

DNS Server 1: 38.8.82.2

DNS Server 2: 192.168.0.1

Beginning IP Address - the IP address at which the DHCP server starts assigning IP addresses. *Action*tec recommends keeping the factory default setting (192.168.0.2).

Ending IP Address - the IP Address at which the DHCP Server stops assigning IP addresses. *Action*tec recommends keeping the factory default settings (192.168.0.254).

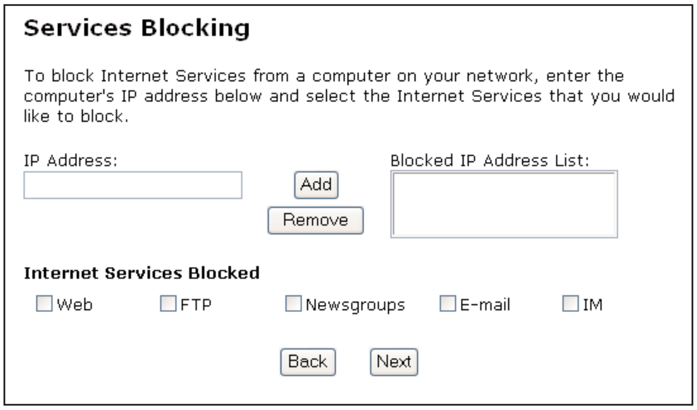
The beginning and ending IP addresses define the IP address range of the Modem. If the default values are left intact, the Modem supplies a unique IP address between 192.168.0.2 and 192.168.0.254 to each computer on its network. Note that the first three groups of numbers of the addresses are identical; this means they are on the same subnet. The IP address of the Modem must be on the same subnet as the IP address range it generates. For instance, if the Modem's IP address is changed to 111.33.222.1, set the beginning IP address to 111.33.222.2, and the ending IP address to 111.33.222.254.

DNS Server 1 - the primary DNS server provided by the ISP. If the ISP provided DNS server information, enter it here. If not, leave the text box intact.

DNS Server 2 - the secondary DNS provided by the ISP. If the ISP provided secondary DNS server information, enter it here. If not, leave the text box intact.

Services Blocking

Selecting **Services Blocking** in the “Configuring the Advanced Settings” screen generates the “Services Blocking” screen.



Services Blocking

To block Internet Services from a computer on your network, enter the computer's IP address below and select the Internet Services that you would like to block.

IP Address:

Blocked IP Address List:

Internet Services Blocked

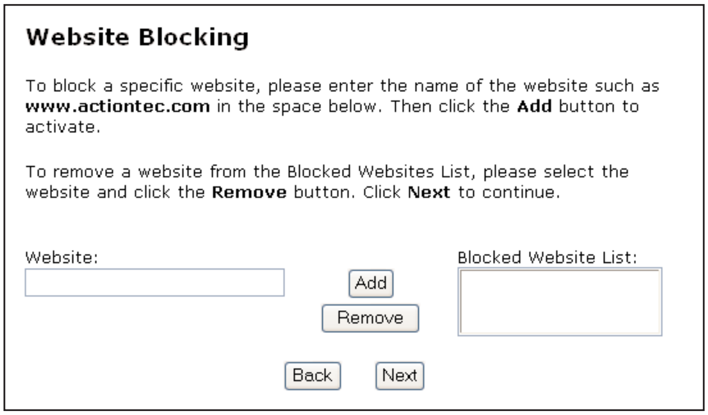
☐ Web ☐ FTP ☐ Newsgroups ☐ E-mail ☐ IM

To modify Internet privileges (Web, FTP, Newsgroups, etc.) for the computers on the network:

1. Enter the computer’s IP address in the **Enter IP Address:** text box.
2. At the bottom of the screen, select the Internet service(s) to be blocked.
3. Click **Add** to enter the computer’s IP address in the “Blocked IP Address List” text box.
4. To remove blocked services, select the computer’s IP address in the “Blocked IP Address List” text box and click **Remove**.

Website Blocking

Selecting **Website Blocking** in the "Configuring the Advanced Settings" screen generates the "Website Blocking" screen. This feature enables the Modem to block Web sites to all computers on the network. To block a Web site, enter the address of the Web site in the "Website" text box and click **Add**. The blocked Web site address will be displayed in the "Blocked Website List" text box, and will not be available to computers on the network. To remove a blocked Web site, click on it in the "Blocked Website List," then click **Remove**.



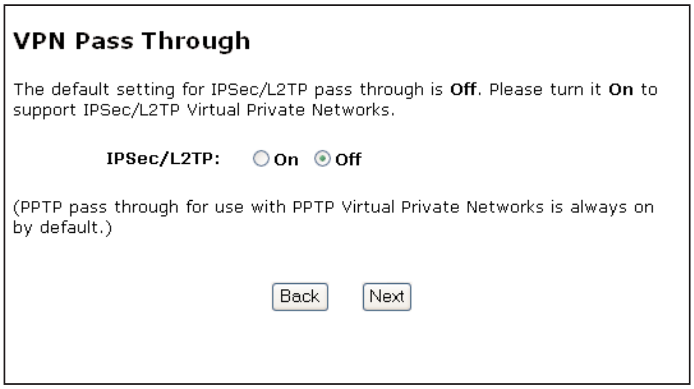
Website Blocking

To block a specific website, please enter the name of the website such as **www.actiontec.com** in the space below. Then click the **Add** button to activate.

To remove a website from the Blocked Websites List, please select the website and click the **Remove** button. Click **Next** to continue.

VPN Pass Through

Selecting **VPN Pass Through** in the "Configuring the Advanced Settings" screen generates the "VPN Pass Through" screen. To set up Virtual Private Networking (VPN) using IPSec/L2TP (which allows multiple, client-initiated VPN pass-through sessions), select **On**. Note that VPN via PPTP pass through is always active.



VPN Pass Through

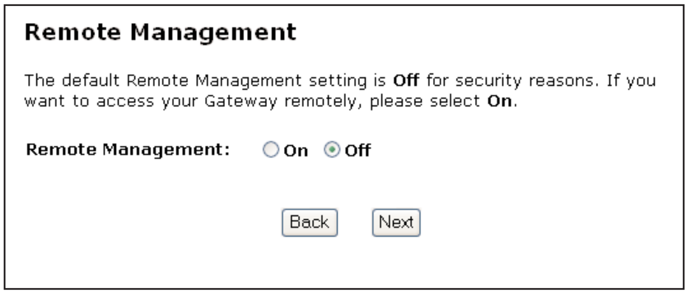
The default setting for IPSec/L2TP pass through is **Off**. Please turn it **On** to support IPSec/L2TP Virtual Private Networks.

IPSec/L2TP: ○ **On** ● **Off**

(PPTP pass through for use with PPTP Virtual Private Networks is always on by default.)

Remote Management

Selecting **Remote Management** in the "Configuring the Advanced Settings" screen generates the "Remote Management" screen. Remote Management allows access to the Modem through the Internet via another computer. *Action*tec recommends leaving the Remote Management **Off** (the factory default setting).



Remote Management

The default Remote Management setting is **Off** for security reasons. If you want to access your Gateway remotely, please select **On**.

Remote Management: ○ On ● Off

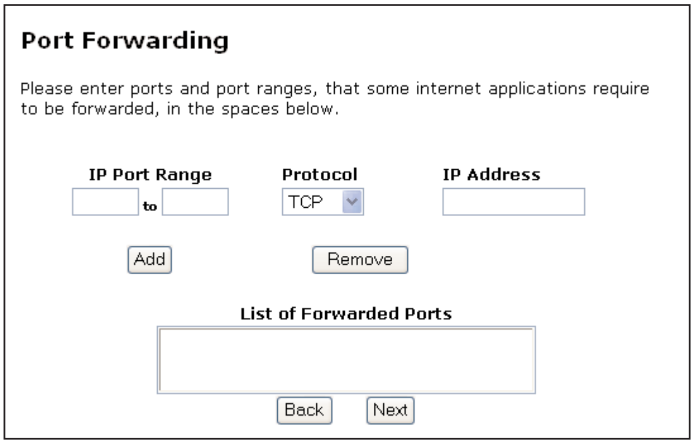
To access the Modem from the Internet, activate Remote Management by selecting **On** and writing down the WAN IP address of the Modem (see "WAN IP Address"). On a computer outside of the network, open a Web browser and enter the Modem's WAN IP address in the address text box. The Modem's Main Menu (or a password prompt, if a password has been set) appears in the browser window.

Port Forwarding

Selecting **Port Forwarding** in the "Configuring the Advanced Settings" screen generates the "Port Forwarding" screen. Port forwarding allows certain programs to bypass the Modem's built-in firewall to access parts of the network (for hosting a Web or ftp server, for example). To use port forwarding:

1. Enter the IP port range in the "IP Port Range" text boxes. (If more than 10 ports are needed, *Action*tec recommends using DMZ Hosting. See "DMZ Hosting.")
2. Select the protocol type from the "Protocol" list box.
3. Enter the IP address of the computer on the network to be used as a host, then click **Add**. The forwarded ports appear in the "List of Forwarded Ports" text box.

To remove forwarded ports, highlight them then click **Remove**.

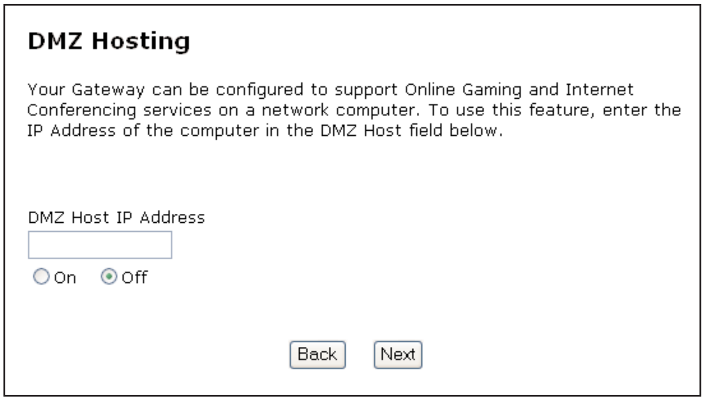


Port Forwarding

Please enter ports and port ranges, that some internet applications require to be forwarded, in the spaces below.

DMZ Hosting

Selecting **DMZ Hosting** in the "Configuring the Advanced Settings" screen generates the "DMZ Hosting" screen. To use DMZ hosting, enter the IP address of the computer on the network to be used as a DMZ host in the "DMZ Host IP Address" text box, then click **On**.



DMZ Hosting

Your Gateway can be configured to support Online Gaming and Internet Conferencing services on a network computer. To use this feature, enter the IP Address of the computer in the DMZ Host field below.

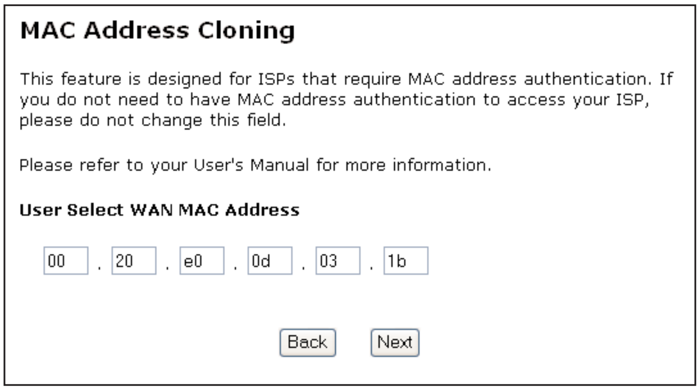
DMZ Host IP Address

○ On ● Off

DMZ hosting is used to support online gaming and Internet conferencing services. These programs usually require multiple open ports, making the network accessible from the Internet. DMZ hosting symbolically places the DMZ host computer outside of the Modem's network. Access to network resources is unavailable while DMZ hosting is active. *Action*tec recommends activating DMZ hosting only as long as necessary.

MAC Address Cloning

Selecting **MAC Address Cloning** in the "Configuring the Advanced Settings" screen generates the "MAC Address Cloning" screen. A MAC (media access control) address is an identifier unique to every networkable device. Some ISPs require a MAC address to validate a computer's permission to be on their network. If the ISP requires this information, obtain the MAC address of the computer originally configured for the ISP (see Appendix C for instructions to determine the computer's MAC address). Enter the MAC address in the "User Select WAN MAC Address" text boxes in the "MAC Address Cloning" screen.



MAC Address Cloning

This feature is designed for ISPs that require MAC address authentication. If you do not need to have MAC address authentication to access your ISP, please do not change this field.

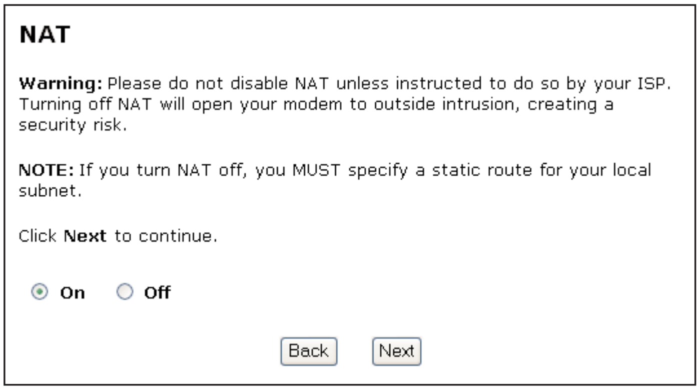
Please refer to your User's Manual for more information.

User Select WAN MAC Address

00 . 20 . e0 . 0d . 03 . 1b

NAT (Network Address Translation)

Selecting **NAT** in the "Configuring the Advanced Settings" screen generates the "NAT" screen. Disabling NAT allows the computers connected to the Modem/Router to be accessed by outside parties. Do not turn NAT off unless instructed to do so by the ISP.



NAT

Warning: Please do not disable NAT unless instructed to do so by your ISP. Turning off NAT will open your modem to outside intrusion, creating a security risk.

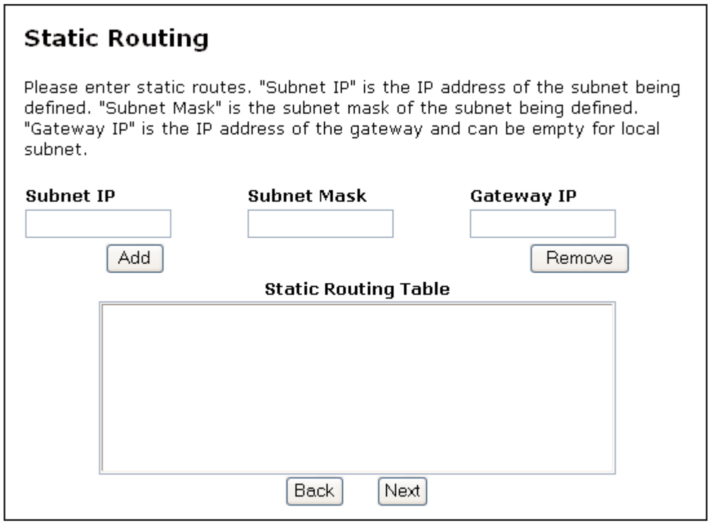
NOTE: If you turn NAT off, you MUST specify a static route for your local subnet.

Click **Next** to continue.

● On ○ Off

Static Routing

Selecting **Static Routing** in the "Configuring the Advanced Settings" screen generates the "Static Routing" screen. Enter the addresses in their respective text boxes, then click **Add**. The address will appear in the "Static Routing Table." To remove an address, highlight it by clicking on it in the Static Routing Table, then click **Remove**.



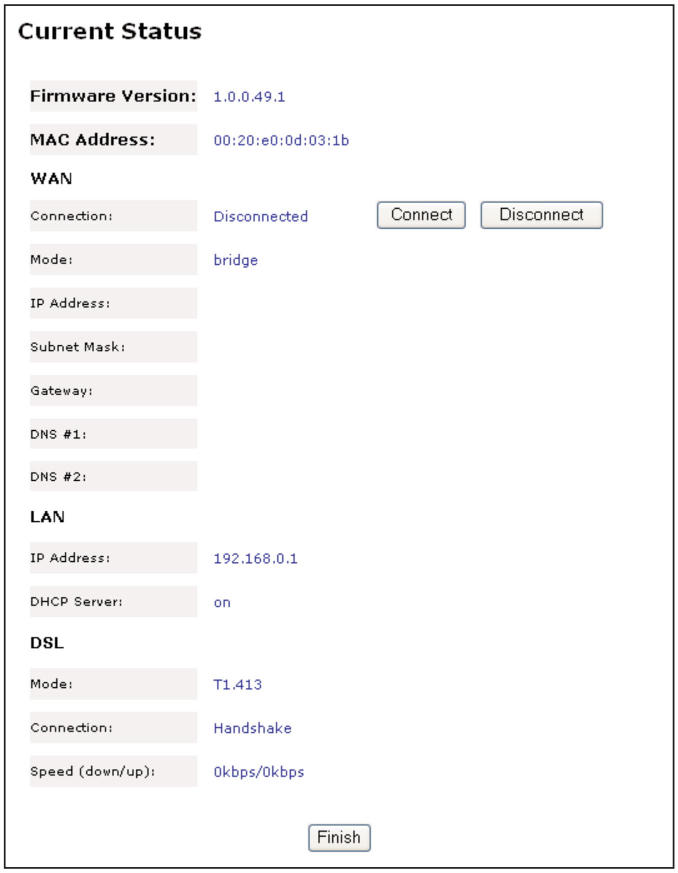
Static Routing

Please enter static routes. "Subnet IP" is the IP address of the subnet being defined. "Subnet Mask" is the subnet mask of the subnet being defined. "Gateway IP" is the IP address of the gateway and can be empty for local subnet.

Subnet IP
Subnet Mask
Gateway IP
Add
Remove
Static Routing Table
Back
Next

Status

After configuring the Modem, settings can be viewed by selecting **Status** in the Main Menu. The "Current Status" screen appears, displaying many of the Modem's settings. No settings (other than connecting or disconnecting from the Internet) can be changed from the Current Status screen.



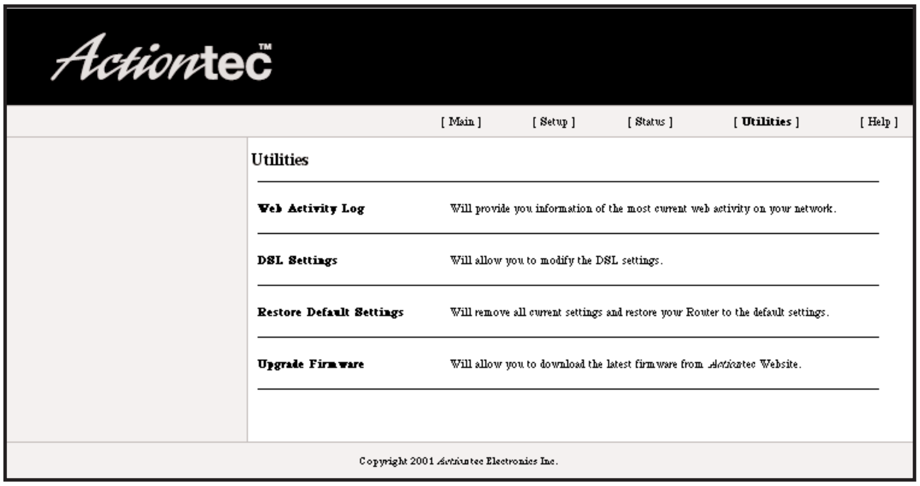
Current Status

Firmware Version:	1.0.0.49.1
MAC Address:	00:20:e0:0d:03:1b
WAN	
Connection:	Disconnected
Mode:	bridge
IP Address:	
Subnet Mask:	
Gateway:	
DNS #1:	
DNS #2:	
LAN	
IP Address:	192.168.0.1
DHCP Server:	on
DSL	
Mode:	T1.413
Connection:	Handshake
Speed (down/up):	0kbps/0kbps

Using Utilities

4

To access the Modems' Web-based Utilities, select **Utilities** from the "Main Menu" screen. The "Utilities" screen appears.



Utilities

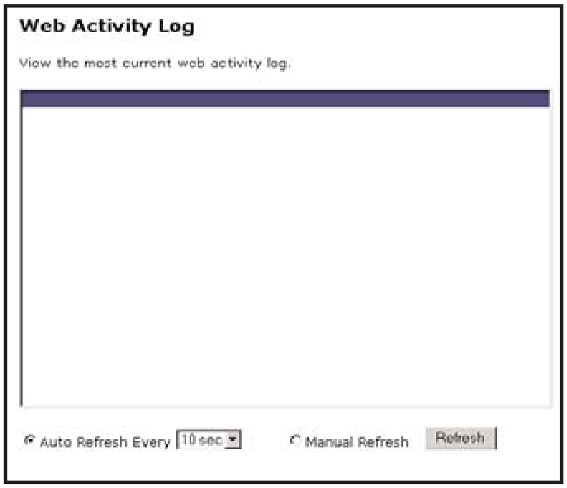
Web Activity Log	Will provide you information of the most current web activity on your network.
DSL Settings	Will allow you to modify the DSL settings.
Restore Default Settings	Will remove all current settings and restore your Router to the default settings.
Upgrade Firmware	Will allow you to download the latest firmware from Actiontec Website.

Copyright 2001 Actiontec Electronics Inc.

From this screen, the Web activity log can be viewed, the DSL settings changed, the Modem's factory default settings restored, and the Modem's firmware upgraded.

Web Activity Log

The Web Activity Log provides information about the Web sites each computer on the Modem's network has visited. To access the Web Activity Log, select **Web Activity Log** from the "Utilities" screen.



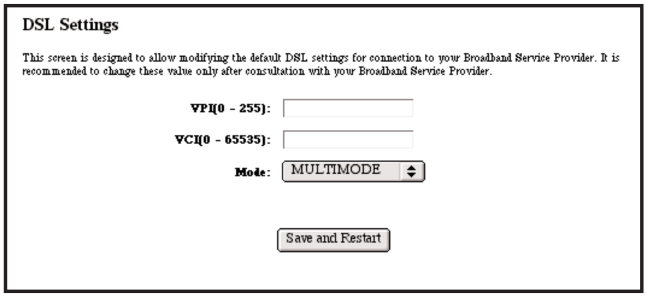
Web Activity Log

View the most current web activity log.

● Auto Refresh Every 10 sec ○ Manual Refresh

DSL Settings

To access DSL Settings, select **DSL Settings** from the “Utilities” screen. The Modem’s VPI, VCI, and Mode settings can be changed from this screen. *Action*tec recommends not changing these values without consulting the ISP.



DSL Settings

This screen is designed to allow modifying the default DSL settings for connection to your Broadband Service Provider. It is recommended to change these value only after consultation with your Broadband Service Provider.

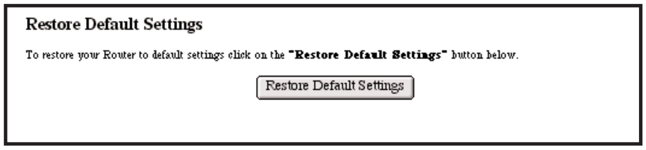
Mode: MULTIMODE

Restore Default Settings

To restore the Modem to its factory default settings, select **Restore Default Settings** from the “Utilities” screen. When the “Restore Default Settings” screen appears, click **Restore Default Settings**. Any changes made to the Modem’s settings in the Custom Setup screens will be lost and the factory default settings will be restored. During this process, the Modem’s power LED flashes and the Modem is disabled.

Warning: Do not unplug the power cord from the Modem during the Restore Default Settings process. Doing so may result in permanent damage to the Modem.

When the Power LED stops flashing and glows steadily green, the Modem is fully operational.

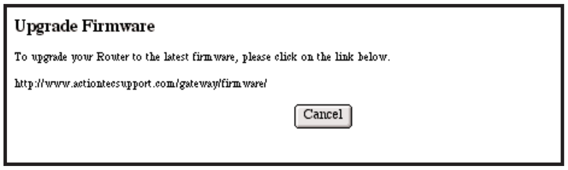


Restore Default Settings

To restore your Router to default settings click on the **"Restore Default Settings"** button below.

Upgrade Firmware

Selecting **Upgrade Firmware** in the “Utilities” screen generates the “Upgrade Firmware” screen. *Action*tec periodically posts firmware upgrades to enhance the Modem’s capabilities.



Upgrade Firmware

To upgrade your Router to the latest firmware, please click on the link below.

http://www.actiontecsupport.com/gateway/firmware/

To upgrade the Modem’s firmware:

1. Click the link in the “Upgrade Firmware” window and download the upgrade files to the hard drive of the computer.

2. Double-click on the upgrade file (upgrade.exe).

3. Click **Start**. The upgrade process begins.

> ***Warning***: Do not unplug the power cord from the Modem during the Upgrade Firmware process. Doing so may result in permanent damage to the Modem.

4. After the upgrade is complete, unplug the power cord from the Modem, then plug it back in again.

5. When the Power LED stops flashing and glows steadily green, the Modem is fully operational.

6. Reconfigure the Modem settings.

Troubleshooting and FAQs

5

This chapter contains a list of solutions to overcome problems the user may encounter, as well as answers to some of the more frequently asked questions about the Modem.

Troubleshooting

LAN Connection Failure

- Ensure the Modem is properly installed, the LAN connections are correct, and the power is on.
- If an Ethernet cable is being used to connect the Modem, ensure that it is a straight-through type cable, not a crossover cable.
- Ensure the LAN LED is on. If not, check the LAN connections.
- Ensure the Subnet Mask address is set to 255.255.255.0 by clicking **Status** in the "Main Menu" screen.

Cannot Connect to the Internet

- Ensure both ends of the power cord and yellow or purple cables are properly connected and the status LEDs on the front panel are working properly.
- If running Windows 98, check the computer's TCP/IP settings. Select **Start**, **Run**, then enter

  ```
  winipcfg
  ```

  in the "Open" text box. Press **Enter** on the keyboard. The computer should have an IP address in the default range (192.168.0.2 through 198.168.0.254).
- Ensure the Subnet Mask address is set to 255.255.255.0 by clicking **Status** in the "Main Menu" screen.

- Verify the Modem's settings are the same as the computer by clicking **Status** in the "Main Menu" screen.

Time out error occurs when entering a URL or IP Address

- Verify the computers are working properly.
- Ensure the IP settings are correct.
- Ensure the Modem is on and connected properly.
- Verify the Modem LED is lit. If not, check all connections
- Verify the Modem's settings are the same as the computer by clicking **Status** in the "Main Menu" screen.
- Check the cable/DSL modem by attempting to connect to the Internet.

Frequently Asked Questions

How can I connect more than one computer to the Router using only Ethernet?

If you want to connect more than one computer to the Modem via Ethernet, you must purchase and install an Ethernet hub or switch, which adds additional Ethernet ports to your network. Connect the "Uplink" port on the hub/switch to the LAN port on the back of the Modem with a standard, straight-through Ethernet cable, then connect the computers to the switch/hub. If the computers are set up for DHCP (see question 1, above), reboot the computers. No further setup is necessary.

How do I know what kind of high speed Internet access I have?

Refer to the documentation received from your ISP. If the Modem connects via phone cord (RJ-11), you probably have a DSL connection.

What do each of the lights on my Modem mean?

Power – when lit, indicates that power is being supplied to the Modem.
Modem – when lit, indicates a cable or DSL modem is connected to the Modem.
Activity – when flashing, indicates Internet activity over the Modem. May also flash when not connected to Internet (indicates communication between modem and Modem).
Link – when lit, indicates a computer is connected to the Modem via Ethernet.

What kind of firewall is included with this Modem?

When the Modem is being used as router, it is equipped with NAT (Network Address Translation), which uses IP address masquerading) protection.

Can I monitor the Web sites my children are accessing? If so, how do I do this?

Yes, you can monitor the Web sites visited by a user on a computer on the network. To do this, log on to the Modem's Web management page (default URL: 192.168.0.1) through your Web browser. From the "Main Menu" screen, select "Utilities," and then click on "Web Activity Log."

How long can I leave the Modem running?

The Modem can run non-stop, 24 hours a day, seven days a week.

What is the maximum number of IP addresses the Modem can support?

The Modem can support up to 253 different IP addresses.

Does the Modem support IPX or AppleTalk?

No. IPX (a NewWare network communication protocol) and AppleTalk (a Macintosh-based communication protocol) are both used primarily in LAN-to-LAN networks, and do not support WAN-to-LAN connections.

Is the Modem cross-platform compatible?

Any platform or operating system that supports Ethernet and TCP/IP is compatible with the Modem.

How do I upgrade the Modem's firmware?

After bringing up the Utilities section of the Web Management Tool and selecting "Upgrade Firmware," click "Upgrade Here." (See Chapter 4 "Using Utilities," for more information.) Another Web page appears, which contains the latest firmware available for the Modem, as well as firmware upgrades for other Actiontec products. Make sure you download firmware for the Modem.

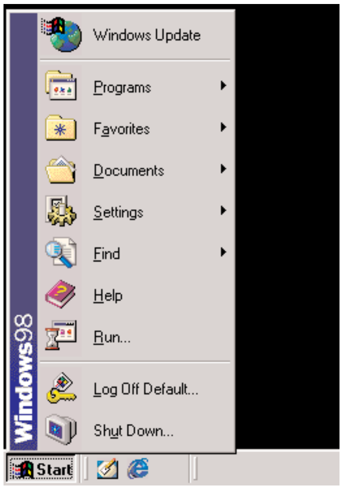
How do I change my IP address from Static to Dynamic, and why do I need to do this?

You should change the Ethernet connection IP address from Static to DHCP (Dynamic Host Connection Protocol) to take advantage of the Modem's ability to provide all the computers on your network a different IP address every time you connect to the Internet. Doing this allows you to effectively share your Internet connection without having to purchase a separate IP address for each computer.

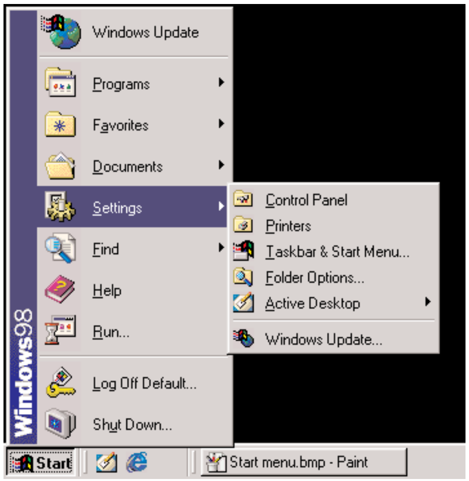
To change your Ethernet connection from Static to DHCP, choose the operating system used on your computer, and follow the directions.

Windows 98 and 98 SE

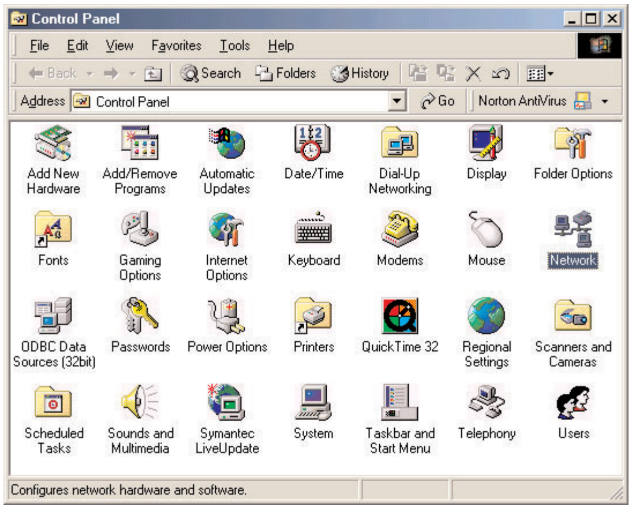
1. From the desktop, click on the **Start** button in the lower left corner.
2. From the menu that appears, select **Settings**.



3. Another menu appears. Select **Control Panel**.

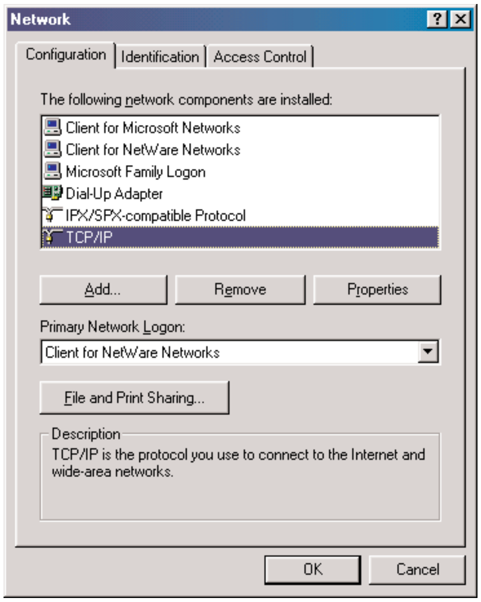

Windows Update
Programs
Favorites
Documents
Settings
Find
Help
Run...
Log Off Default...
Shut Down...
Windows98
Control Panel
Printers
Taskbar & Start Menu...
Folder Options...
Active Desktop
Windows Update...
Start
Start menu.bmp - Paint

4. When the “Control Panel” window appears, double-click **Network**.


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
History
Address
Control Panel
Go
Norton AntiVirus
Add New Hardware
Add/Remove Programs
Automatic Updates
Date/Time
Dial-Up Networking
Display
Folder Options
Fonts
Gaming Options
Internet Options
Keyboard
Modems
Mouse
Network
ODBC Data Sources (32bit)
Passwords
Power Options
Printers
QuickTime 32
Regional Settings
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
Symantec LiveUpdate
System
Taskbar and Start Menu
Telephony
Users

Configures network hardware and software.

5. The “Network” window appears. In the "The following network components are installed" list box, locate and double-click **TCP/IP**.


Network
?
Configuration
Identification
Access Control
Add...
Remove
Properties
File and Print Sharing...
OK
Cancel

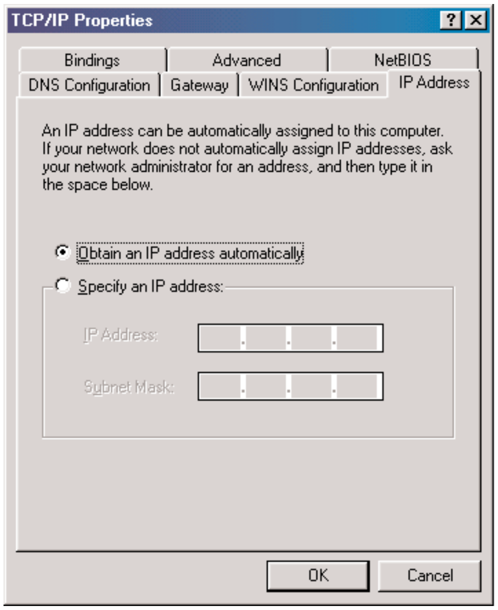
The following network components are installed:

- Client for Microsoft Networks
- Client for NetWare Networks
- Microsoft Family Logon
- Dial-Up Adapter
- IPX/SPX-compatible Protocol
- TCP/IP

Primary Network Logon: Client for NetWare Networks

Description
TCP/IP is the protocol you use to connect to the Internet and wide-area networks.

6. The “TCP/IP Properties” window appears. Select **IP Address**.

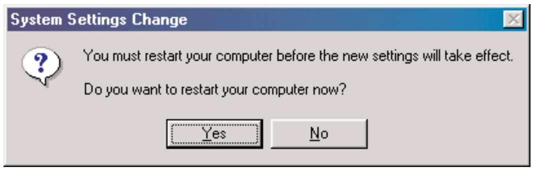

TCP/IP Properties
?
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
IP Address:
Subnet Mask:
OK
Cancel

An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.

● Obtain an IP address automatically

○ Specify an IP address:

7. In the IP Address tab, activate “Obtain an IP address automatically” by clicking on the circle. When active, a black dot will appear in the circle. If the circle already contains a black dot, leave it alone.
8. Click **OK**. The TCP/IP Properties window disappears.
9. In the Network window, click **OK**. The Network window disappears.
10. The “System Settings Change” window appears, asking whether the computer should be restarted. Click **Yes**.



System Settings Change

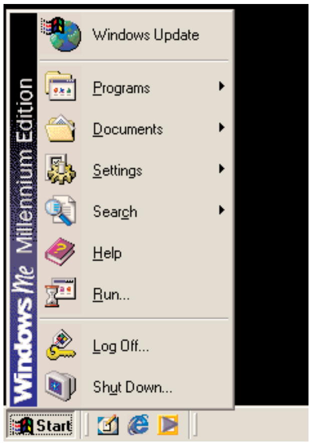
You must restart your computer before the new settings will take effect.

Do you want to restart your computer now?

The computer restarts. It is now set up for DHCP.

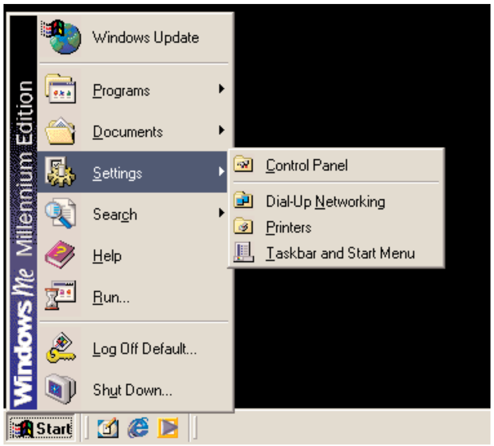
Windows Me

1. From the desktop, click on the Start button in the lower left corner.
2. From the menu that appears, select **Settings**.

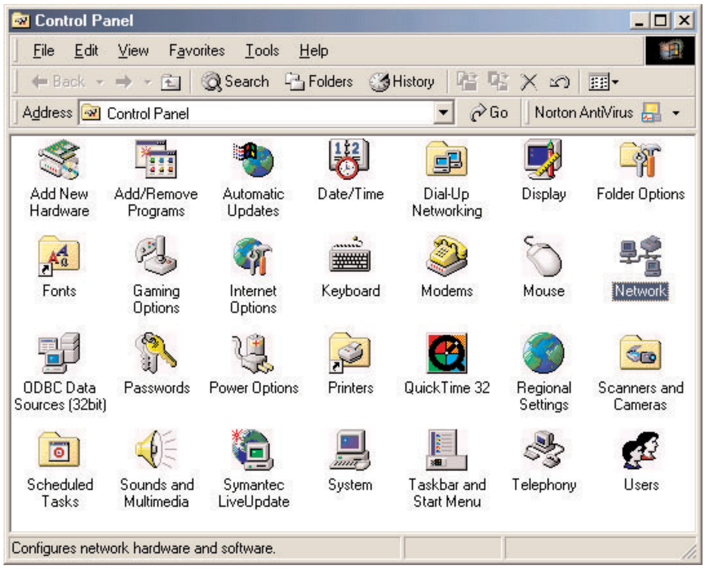


Windows Me Millennium Edition
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Log Off...
Shut Down...
Start

3. Another menu appears. Select **Control Panel**.

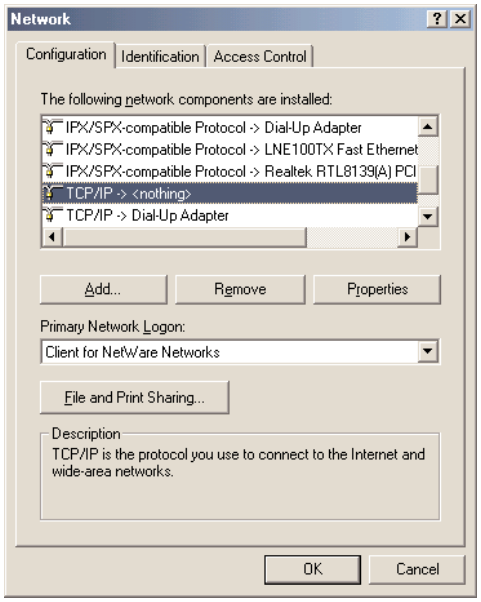

Windows Me Millennium Edition
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Log Off Default...
Shut Down...
Control Panel
Dial-Up Networking
Printers
Taskbar and Start Menu
Start

4. When the “Control Panel” window appears, double-click **Network**.


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
History
Address
Control Panel
Go
Norton AntiVirus
Add New Hardware
Add/Remove Programs
Automatic Updates
Date/Time
Dial-Up Networking
Display
Folder Options
Fonts
Gaming Options
Internet Options
Keyboard
Modems
Mouse
Network
ODBC Data Sources (32bit)
Passwords
Power Options
Printers
QuickTime 32
Regional Settings
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
Symantec LiveUpdate
System
Taskbar and Start Menu
Telephony
Users

Configures network hardware and software.

5. The “Network” window appears. In the “The following network components are installed” list box, locate and double-click **TCP/IP**.



Network

Configuration | Identification | Access Control

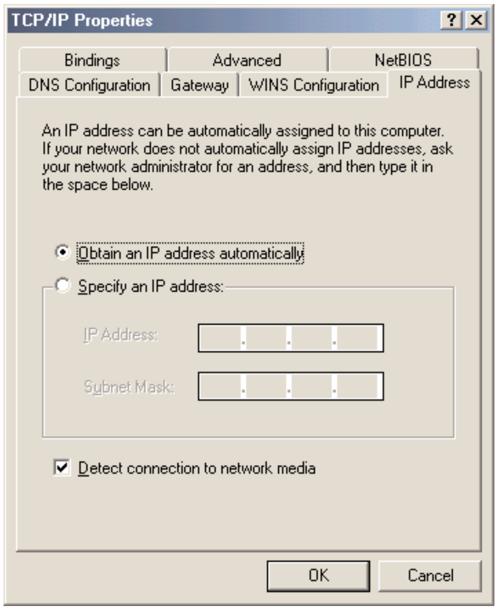
The following network components are installed:

- IPX/SPX-compatible Protocol -> Dial-Up Adapter
- IPX/SPX-compatible Protocol -> LNE100TX Fast Ethernet
- IPX/SPX-compatible Protocol -> Realtek RTL8139(A) PCI
- TCP/IP -> <nothing>
- TCP/IP -> Dial-Up Adapter

Primary Network Logon: Client for NetWare Networks

Description
TCP/IP is the protocol you use to connect to the Internet and wide-area networks.

6. The “TCP/IP Properties” window appears. Click **IP Address**.



TCP/IP Properties

Bindings | Advanced | NetBIOS
DNS Configuration | Gateway | WINS Configuration | IP Address

An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.

● Obtain an IP address automatically
○ Specify an IP address:

IP Address:
Subnet Mask:

☑ Detect connection to network media

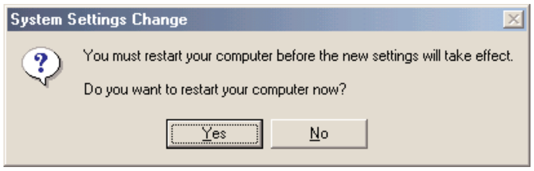
7. In the IP Address tab, activate “Obtain an IP address automatically” by clicking on the circle. When active, a black dot will appear in the circle. If the circle already contains a black dot, leave it alone.

8. Click **OK**. The TCP/IP Properties window disappears.

9. If there is a check in the box next to “Detect connection to network media,” click on it to uncheck the box.

10. In the Network window, click **OK**. The Network window disappears.

11. The “System Settings Change” window appears, asking whether the computer should be restarted. Click **Yes**.



System Settings Change

You must restart your computer before the new settings will take effect.

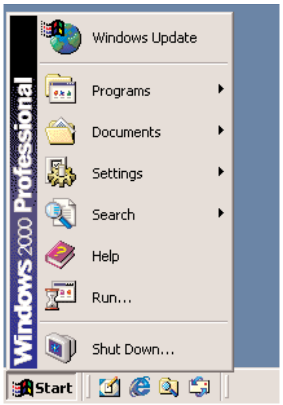
Do you want to restart your computer now?

The computer restarts. It is now set up for DHCP.

Windows 2000

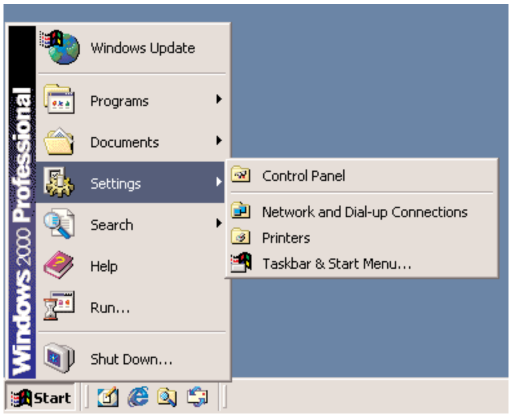
1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Settings**.

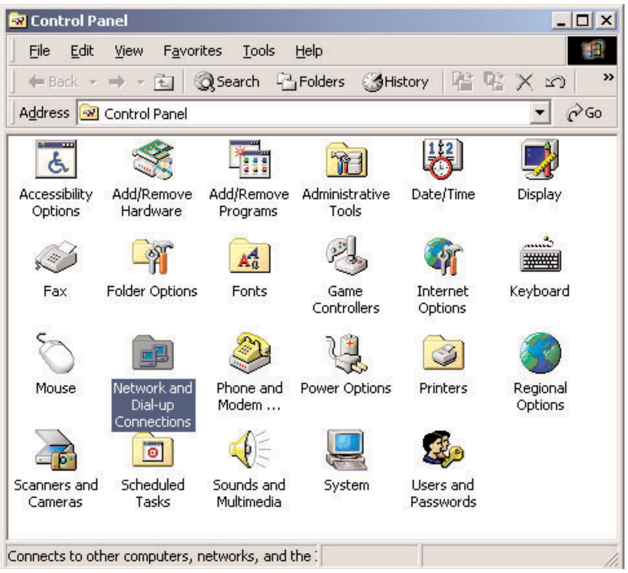


Windows 2000 Professional
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Shut Down...
Start

3. Another menu appears. Select **Control Panel**.

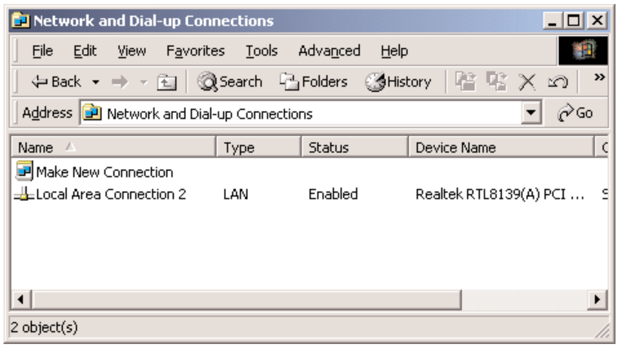

Windows 2000 Professional
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Shut Down...
Start
Control Panel
Network and Dial-up Connections
Printers
Taskbar & Start Menu...

4. When the "Control Panel" window appears, double-click **Network and Dial-up Connections**.


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
History
Address
Control Panel
Go
Accessibility Options
Add/Remove Hardware
Add/Remove Programs
Administrative Tools
Date/Time
Display
Fax
Folder Options
Fonts
Game Controllers
Internet Options
Keyboard
Mouse
Network and Dial-up Connections
Phone and Modem ...
Power Options
Printers
Regional Options
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
System
Users and Passwords

Connects to other computers, networks, and the

5. In the “Network and Dial-up Connections” window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If there is more than one Local Area Connection listed, locate the one that corresponds to the network card installed in the computer by finding the name of the network card in the **Device Name** column.

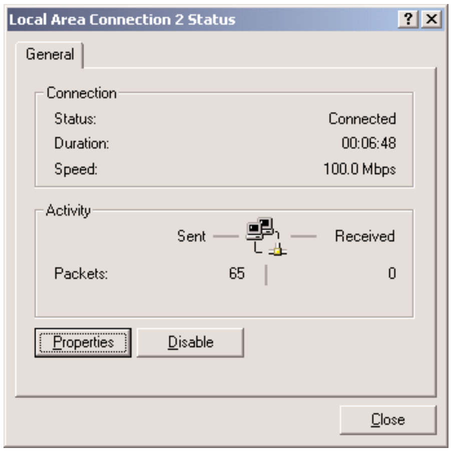

Network and Dial-up Connections
File
Edit
View
Favorites
Tools
Advanced
Help
Back
Search
Folders
History
Go

Address: Network and Dial-up Connections

Name	Type	Status	Device Name
Make New Connection			
Local Area Connection 2	LAN	Enabled	Realtek RTL8139(A) PCI ...

2 object(s)

6. The “Local Area Connection Status” window appears. Select **General**, then click **Properties**.

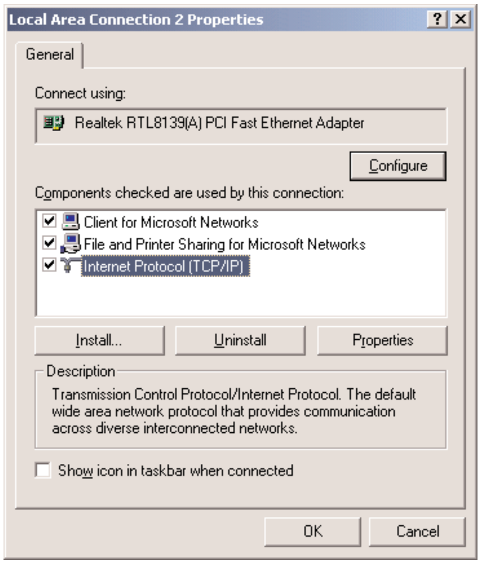

Local Area Connection 2 Status
General
Connection
Activity
Sent
Received
Properties
Disable
Close

Status: Connected
Duration: 00:06:48
Speed: 100.0 Mbps

Packets: Sent 65, Received 0

7. The “Local Area Connection Properties” window appears. Click **General**.

8. In the “Components checked are used by this connection” list box, double-click **Internet Protocol** (TCP/IP).



Local Area Connection 2 Properties

Connect using:

Realtek RTL8139(A) PCI Fast Ethernet Adapter

Components checked are used by this connection:

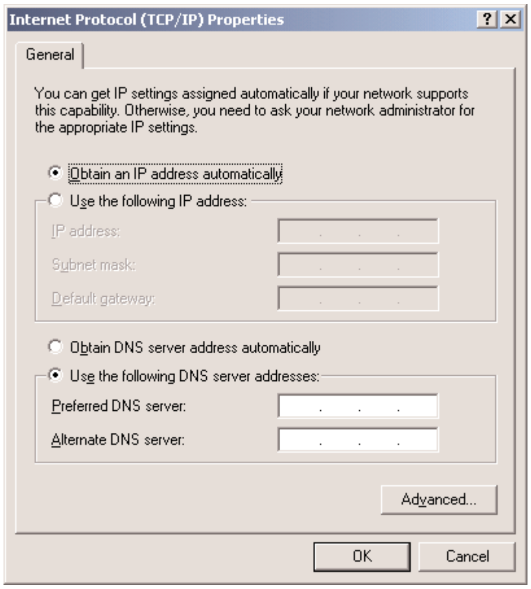
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ Internet Protocol (TCP/IP)

Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in taskbar when connected

9. The “Internet Protocol (TCP/IP) Properties” window appears.



Internet Protocol (TCP/IP) Properties

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

● Obtain an IP address automatically
○ Use the following IP address:

IP address: . . .
Subnet mask: . . .
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:

Preferred DNS server: . . .
Alternate DNS server: . . .

10. In the **General** tab, activate "Obtain an IP address automatically" by clicking on the circle. When active, a black dot will appear in the circle. If the circle already contains a black dot, leave it alone.

12. Click **OK**. The "Internet Protocol (TCP/IP) Properties" window disappears.

13. In the "Local Area Connection Properties" window, click **OK**. The Local Area Connection Properties window disappears.

14. Click **Close** in the Local Area Connection Status window. The window disappears.

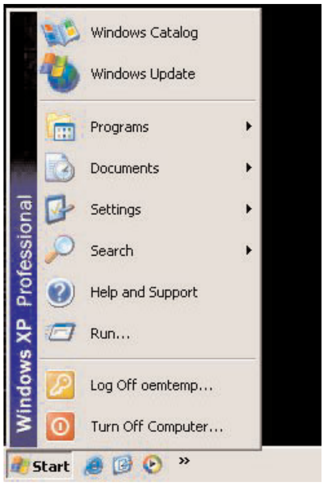
15. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up for DHCP.

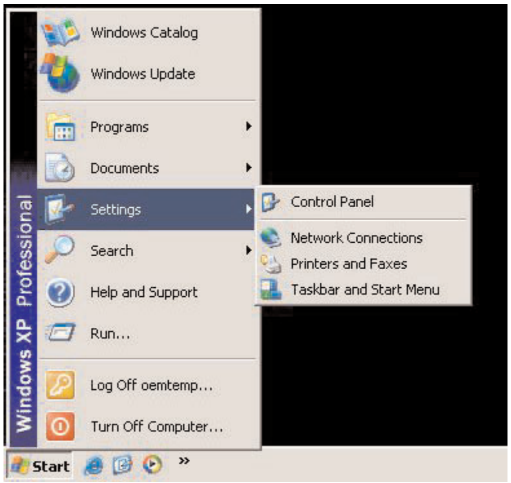
Windows XP

1. From the desktop, click on the **Start** button in the lower left corner.

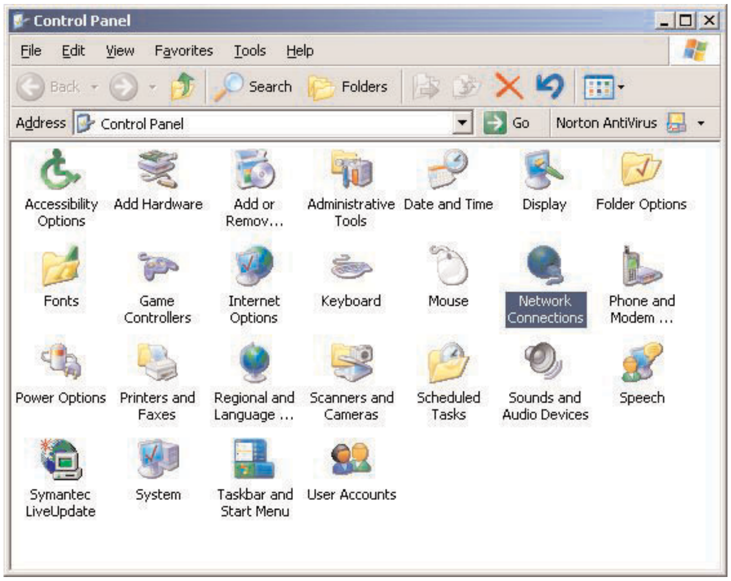
2. From the menu that appears, select **Settings**.


Windows Catalog
Windows Update
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off oemtemp...
Turn Off Computer...
Windows XP Professional
Start

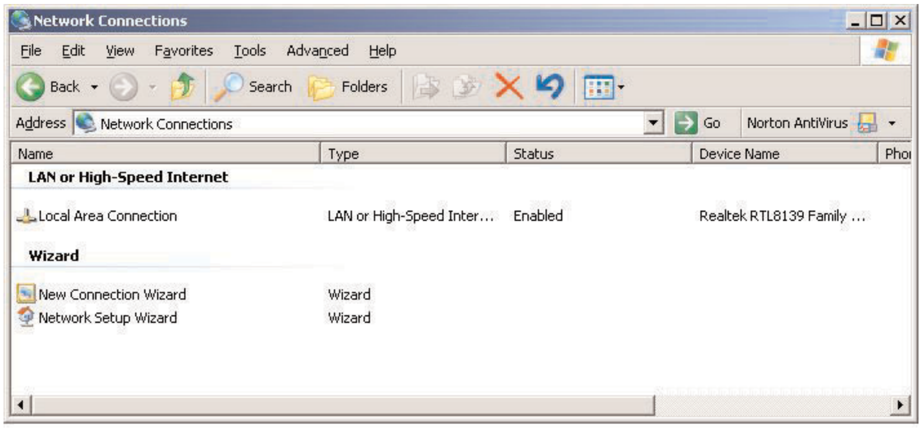
3. Another menu appears. Select **Control Panel**.


Windows XP Professional
Windows Catalog
Windows Update
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off oemtemp...
Turn Off Computer...
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu
Start

4. When the "Control Panel" window appears, double-click **Network Connections**.

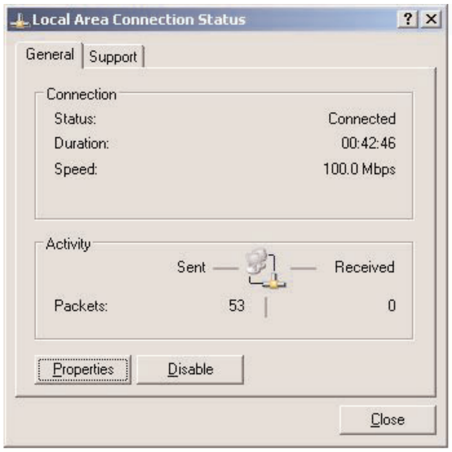

Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel Go Norton AntiVirus
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Date and Time
Display
Folder Options
Fonts
Game Controllers
Internet Options
Keyboard
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Sounds and Audio Devices
Speech
Symantec LiveUpdate
System
Taskbar and Start Menu
User Accounts

5. In the "Network Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If there is more than one Local Area Connection listed, locate the one that corresponds to the network card installed in your computer by finding the name of the network card in the **Device Name** column.


Network Connections
File
Edit
View
Favorites
Tools
Advanced
Help
Back
Search
Folders
Address
Network Connections
Go
Norton AntiVirus

Name	Type	Status	Device Name	Phoi
LAN or High-Speed Internet				
Local Area Connection	LAN or High-Speed Inter...	Enabled	Realtek RTL8139 Family ...	
Wizard				
New Connection Wizard	Wizard			
Network Setup Wizard	Wizard			

6. The "Local Area Connection Status" window appears. Select **General**, then click **Properties**.

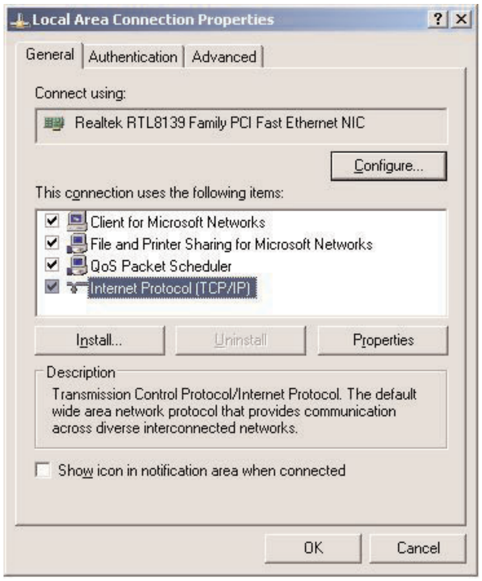

Local Area Connection Status
General
Support
Properties
Disable
Close

Connection
Status: Connected
Duration: 00:42:46
Speed: 100.0 Mbps

Activity
Sent — Received
Packets: 53 | 0

7. The "Local Area Connection Properties" window appears. Select **General**.

8. In the "Components checked are used by this connection" list box, double-click **Internet Protocol** (TCP/IP).


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

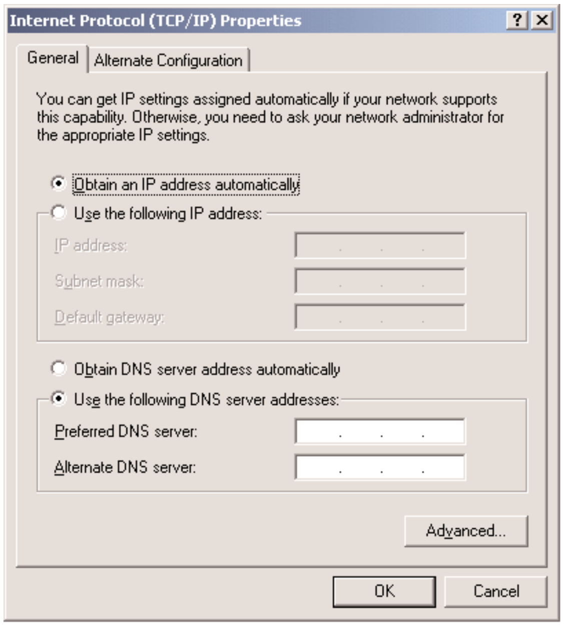
Connect using:
Realtek RTL8139 Family PCI Fast Ethernet NIC

This connection uses the following items:
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected

9. The "Internet Protocol (TCP/IP) Properties" window appears.


Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
Advanced...
OK
Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

● Obtain an IP address automatically
○ Use the following IP address:
IP address: . . .
Subnet mask: . . .
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

10. In the **General** tab, activate "Obtain an IP address automatically" by clicking on the circle. When active, a black dot will appear in the circle. If the circle already contains a black dot, leave it alone.

11. Click **OK**. The Internet Protocol (TCP/IP) Properties window disappears.

12. In the Local Area Connection Properties window, click **OK**. The Local Area Connection Properties window disappears.
13. Click **Close** in the Local Area Connection Status window. The window disappears.
14. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up for DHCP.

Setting Up Static IP Address

A

To communicate with the Modem from a computer on the network (to use the Web Configuration Utility, for example), the user may have to switch the IP address settings from DHCP-enabled to static IP, so that the computer and the Modem are on the same subnet.

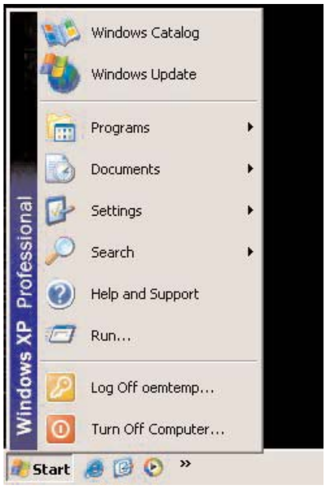
To set up static IP on a computer, select the operating system and follow the instructions.

☞ ***Note***: The following procedures are based on the Modem's factory default IP address. If the Modem's IP address has been changed, enter the new IP address when instructed to enter an IP address.

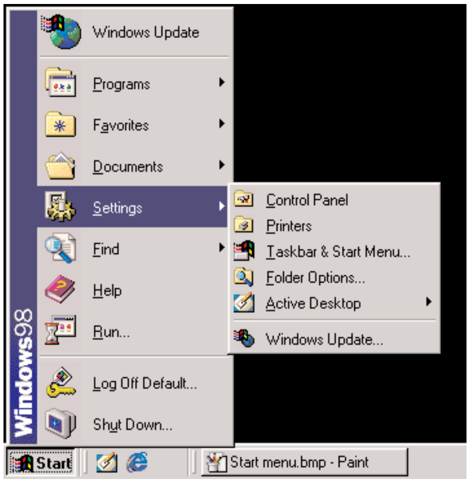
Windows 98 and 98 SE

1. From the desktop, click on the **Start** button in the lower left corner.

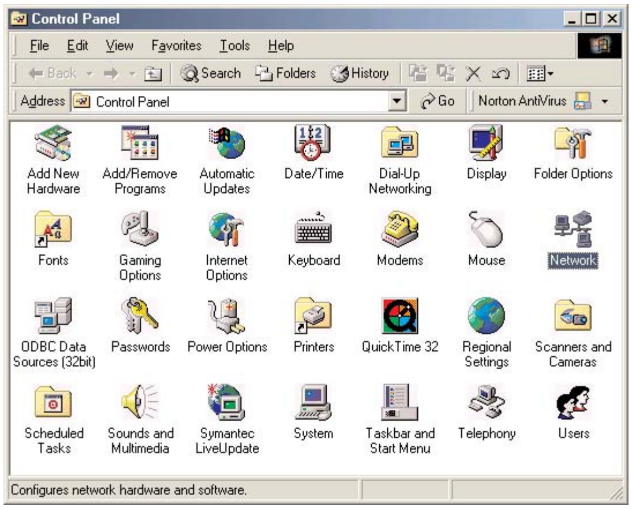
2. From the menu that appears, select **Settings**.


Windows Catalog
Windows Update
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off oemtemp...
Turn Off Computer...
Windows XP Professional
Start

3. Another menu appears. Select **Control Panel**.

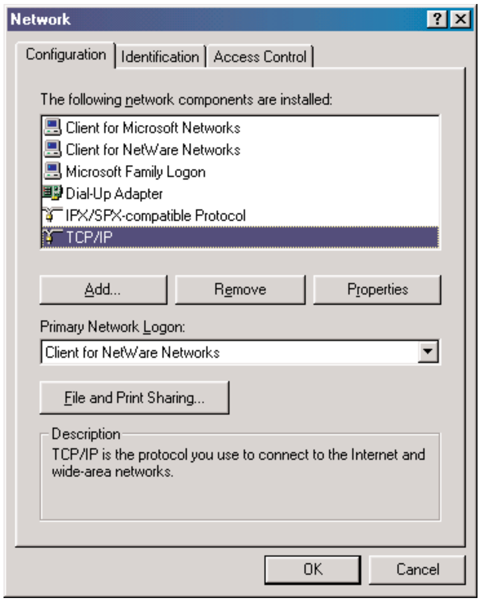

Windows Update
Programs
Favorites
Documents
Settings
Find
Help
Run...
Log Off Default...
Shut Down...
Windows98
Control Panel
Printers
Taskbar & Start Menu...
Folder Options...
Active Desktop
Windows Update...
Start
Start menu.bmp - Paint

4. When the “Control Panel” window appears, double-click **Network**.


Control Panel
File Edit View Favorites Tools Help
Back
Search
Folders
History
Address
Control Panel
Go
Norton AntiVirus
Add New Hardware
Add/Remove Programs
Automatic Updates
Date/Time
Dial-Up Networking
Display
Folder Options
Fonts
Gaming Options
Internet Options
Keyboard
Modems
Mouse
Network
ODBC Data Sources (32bit)
Passwords
Power Options
Printers
QuickTime 32
Regional Settings
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
Symantec LiveUpdate
System
Taskbar and Start Menu
Telephony
Users

Configures network hardware and software.

5. The “Network” window appears. In the "The following network components are installed" list box, locate and double-click **TCP/IP**.

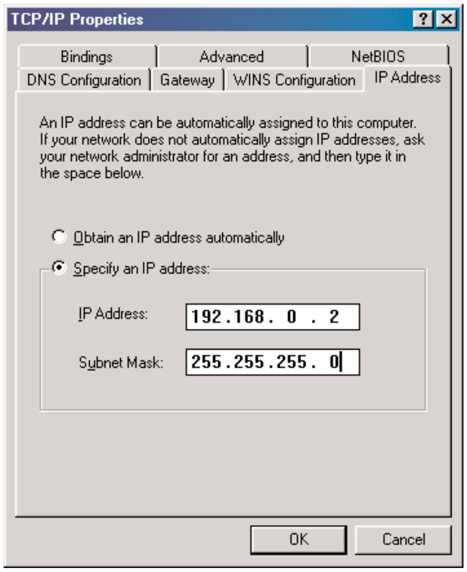

Network
Configuration
Identification
Access Control
Add...
Remove
Properties
File and Print Sharing...
OK
Cancel

The following network components are installed:
- Client for Microsoft Networks
- Client for NetWare Networks
- Microsoft Family Logon
- Dial-Up Adapter
- IPX/SPX-compatible Protocol
- TCP/IP

Primary Network Logon: Client for NetWare Networks

Description
TCP/IP is the protocol you use to connect to the Internet and wide-area networks.

6. The “TCP/IP Properties” window appears. Select **IP Address**.


TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
OK
Cancel

An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.

○ Obtain an IP address automatically
● Specify an IP address:

IP Address: 192.168. 0 . 2
Subnet Mask: 255.255.255. 0

7. In the IP Address tab, make sure the the circle next to “Specify an IP Address” is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

8. Enter the following numbers in the “IP Address” text box:

   `192.168.0.2`

   Do not include the periods; they are automatically entered.

9. Enter the following numbers in the "Subnet mask" text box:

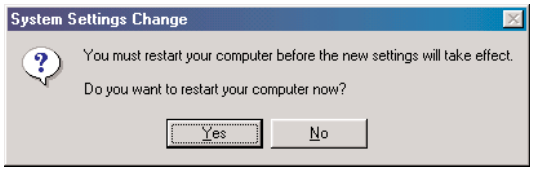
`255.255.255.0`

Do not include the periods; they are automatically entered.

10. Click **OK**. The TCP/IP Properties window disappears.

11. In the Network window, click **OK**. The Network window disappears.

12. The "System Settings Change" window appears, asking whether the computer should be restarted. Click **Yes**.


System Settings Change
Yes
No

You must restart your computer before the new settings will take effect.

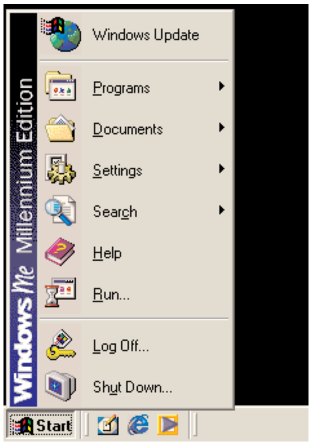
Do you want to restart your computer now?

The computer restarts. It is now set up with a static IP address, allowing the user to access the Modem's Advanced Setup utility.

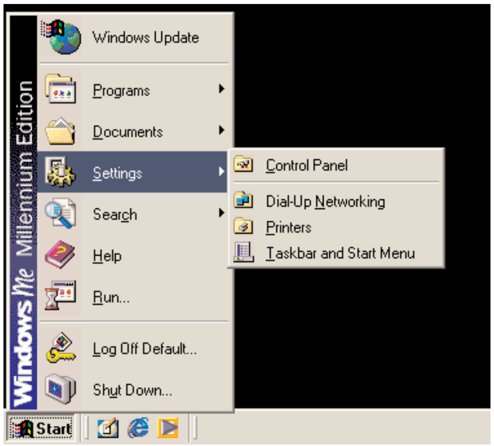
Windows Me

1. From the desktop, click on the **Start** button in the lower left corner.

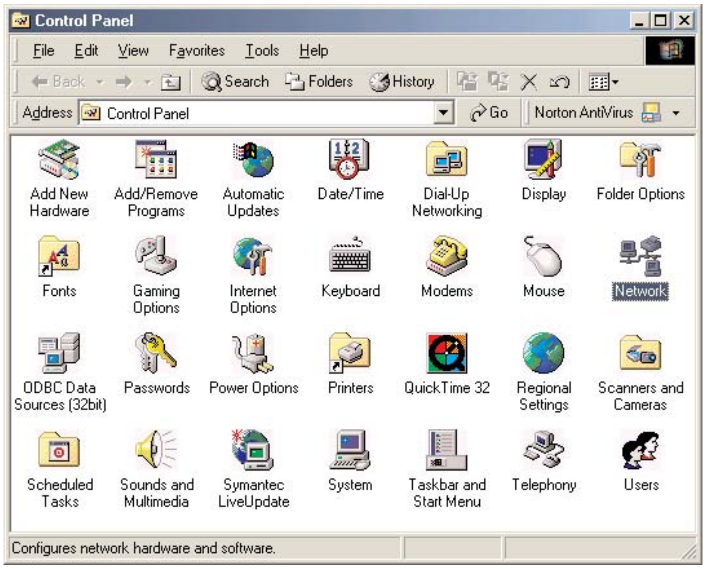
2. From the menu that appears, select **Settings**.


Windows Me Millennium Edition
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Log Off...
Shut Down...
Start

3. Another menu appears. Select **Control Panel**.

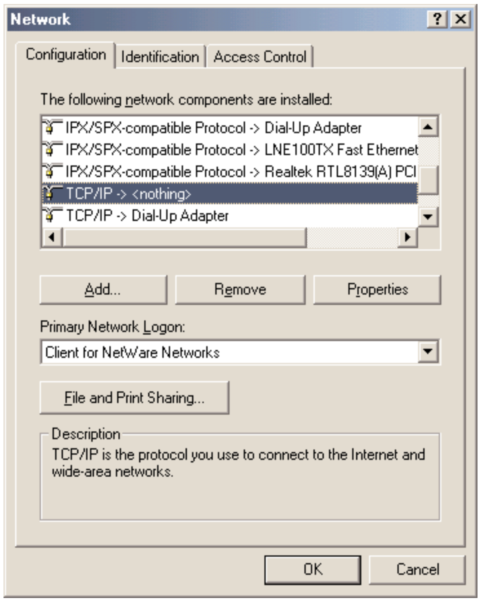

Windows Update
Programs
Documents
Settings
Search
Help
Run...
Log Off Default...
Shut Down...
Control Panel
Dial-Up Networking
Printers
Taskbar and Start Menu
Windows Me Millennium Edition
Start

4. When the “Control Panel” window appears, double-click **Network**.


Control Panel
File Edit View Favorites Tools Help
Back Search Folders History
Address Control Panel Go Norton AntiVirus
Add New Hardware
Add/Remove Programs
Automatic Updates
Date/Time
Dial-Up Networking
Display
Folder Options
Fonts
Gaming Options
Internet Options
Keyboard
Modems
Mouse
Network
ODBC Data Sources (32bit)
Passwords
Power Options
Printers
QuickTime 32
Regional Settings
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
Symantec LiveUpdate
System
Taskbar and Start Menu
Telephony
Users

Configures network hardware and software.

5. The “Network” window appears. In the “The following network components are installed” list box, locate and double-click **TCP/IP**.


Network
Configuration
Identification
Access Control
Add...
Remove
Properties
File and Print Sharing...
OK
Cancel

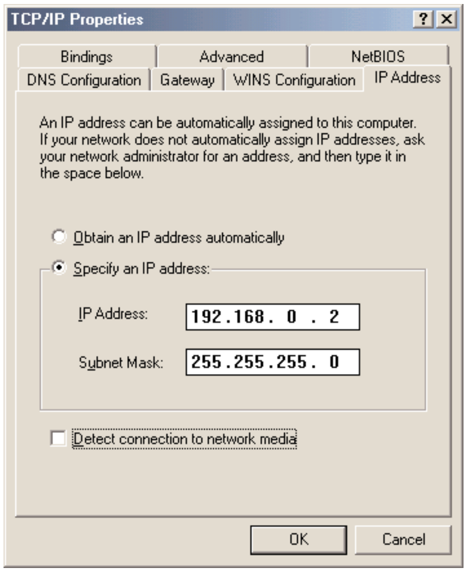
The following network components are installed:

- IPX/SPX-compatible Protocol -> Dial-Up Adapter
- IPX/SPX-compatible Protocol -> LNE100TX Fast Ethernet
- IPX/SPX-compatible Protocol -> Realtek RTL8139(A) PCI
- TCP/IP -> <nothing>
- TCP/IP -> Dial-Up Adapter

Primary Network Logon: Client for NetWare Networks

Description
TCP/IP is the protocol you use to connect to the Internet and wide-area networks.

6. The “TCP/IP Properties” window appears. Click **IP Address**.


TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
OK
Cancel

An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.

○ Obtain an IP address automatically
● Specify an IP address:

IP Address: 192.168. 0 . 2
Subnet Mask: 255.255.255. 0

☐ Detect connection to network media

7. In the IP Address tab, make sure the the circle next to “Specify an IP Address” is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

8. Enter the following numbers in the “IP Address” text box:

   `192.168.0.2`

   Do not include the periods; they are automatically entered.

9. Enter the following numbers in the "Subnet mask" text box:

   `255.255.255.0`

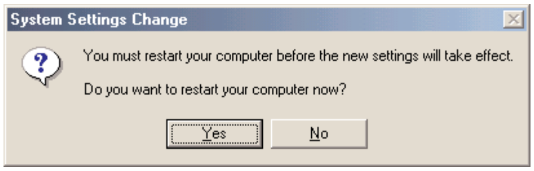
   Do not include the periods; they are automatically entered.

10. Click **OK**. The TCP/IP Properties window disappears.

11. If there is a check in the box next to "Detect connection to network media," click on it to uncheck the box.

12. In the Network window, click **OK**. The Network window disappears.

13. The "System Settings Change" window appears, asking whether the computer should be restarted. Click **Yes**.



System Settings Change

You must restart your computer before the new settings will take effect.

Do you want to restart your computer now?

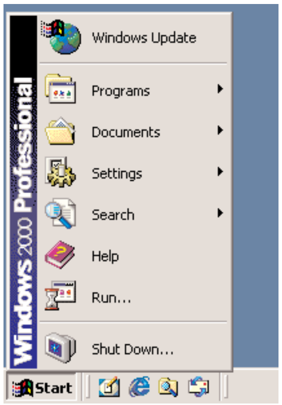
Yes
No

The computer restarts. It is now set up with a static IP address, allowing the user to access the Modem's Advanced Setup utility.

Windows 2000

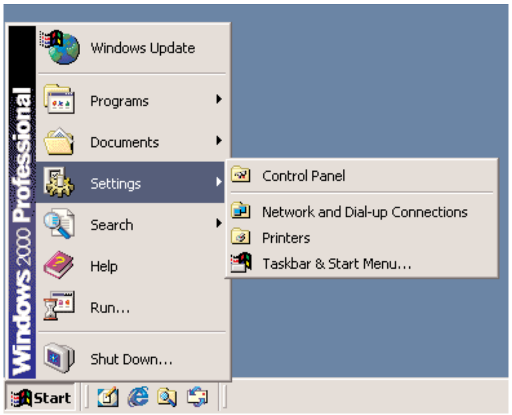
1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Settings**.

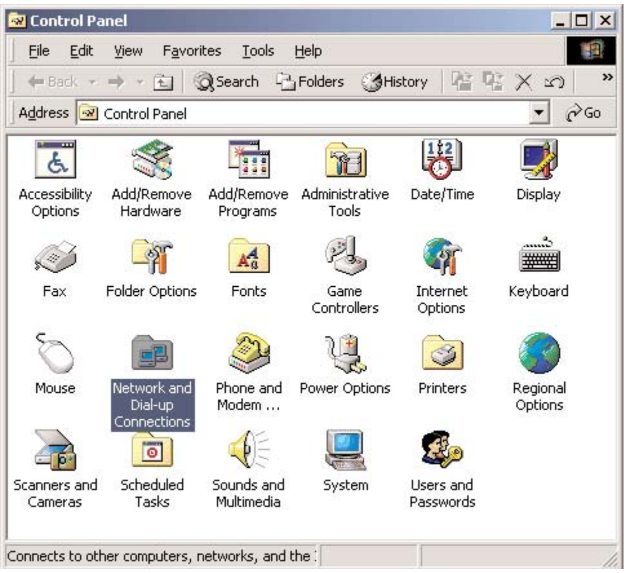


Windows 2000 Professional
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Shut Down...
Start

3. Another menu appears. Select **Control Panel**.

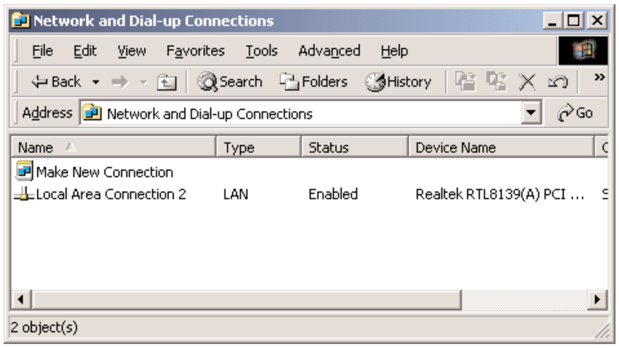

Windows 2000 Professional
Windows Update
Programs
Documents
Settings
Search
Help
Run...
Shut Down...
Start
Control Panel
Network and Dial-up Connections
Printers
Taskbar & Start Menu...

4. When the “Control Panel” window appears, double-click **Network and Dial-up Connections**.


Control Panel
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
History
Address
Control Panel
Go
Accessibility Options
Add/Remove Hardware
Add/Remove Programs
Administrative Tools
Date/Time
Display
Fax
Folder Options
Fonts
Game Controllers
Internet Options
Keyboard
Mouse
Network and Dial-up Connections
Phone and Modem ...
Power Options
Printers
Regional Options
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
System
Users and Passwords

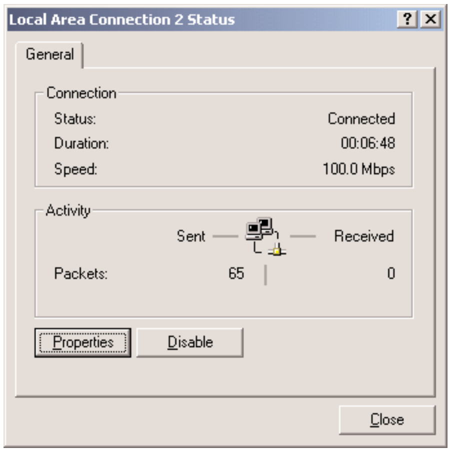
Connects to other computers, networks, and the

5. In the "Network and Dial-up Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If there is more than one Local Area Connection listed, locate the one that corresponds to the network card installed in the computer by finding the name of the network card in the **Device Name** column.


Network and Dial-up Connections
File
Edit
View
Favorites
Tools
Advanced
Help
Back
Search
Folders
History
Address
Network and Dial-up Connections
Go
2 object(s)

Name	Type	Status	Device Name
Make New Connection			
Local Area Connection 2	LAN	Enabled	Realtek RTL8139(A) PCI ...

6. The "Local Area Connection Status" window appears. Select **General**, then click **Properties**.

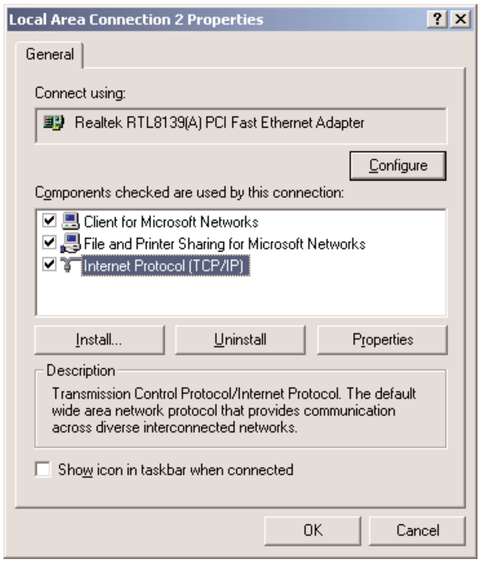

Local Area Connection 2 Status
General
Properties
Disable
Close

Connection
Status: Connected
Duration: 00:06:48
Speed: 100.0 Mbps

Activity
Sent — Received
Packets: 65 | 0

7. The “Local Area Connection Properties” window appears. Click **General**.

8. In the “Components checked are used by this connection” list box, double-click **Internet Protocol** (TCP/IP).



Connect using:

Realtek RTL8139(A) PCI Fast Ethernet Adapter

Components checked are used by this connection:

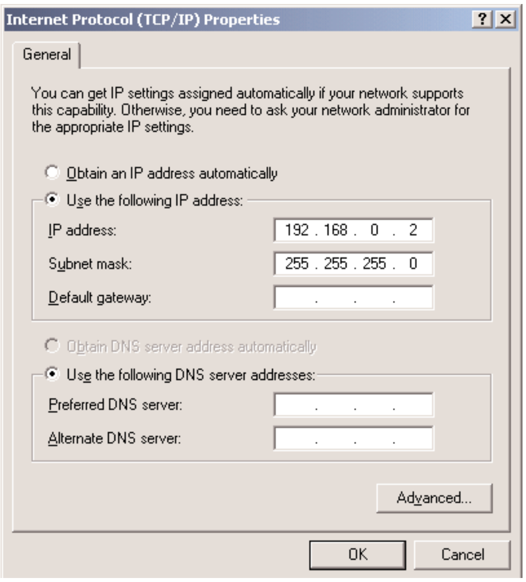
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ Internet Protocol (TCP/IP)

Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in taskbar when connected

9. The “Internet Protocol (TCP/IP) Properties” window appears.



You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 0 . 2
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

10. In the **General** tab, make sure the the circle next to “Obtain an IP Address automatically” is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

11. Enter the following numbers in the “IP Address” text box:

`192.168.0.2`

Do not include the periods; they are automatically entered.

12. Enter the following numbers in the "Subnet mask" text box:

`255.255.255.0`

Do not include the periods; they are automatically entered.

13. Click **OK**. The "Internet Protocol (TCP/IP) Properties" window disappears.

14 In the "Local Area Connection Properties" window, click **OK**. The Local Area Connection Properties window disappears.

15. Click **Close** in the Local Area Connection Status window. The window disappears.

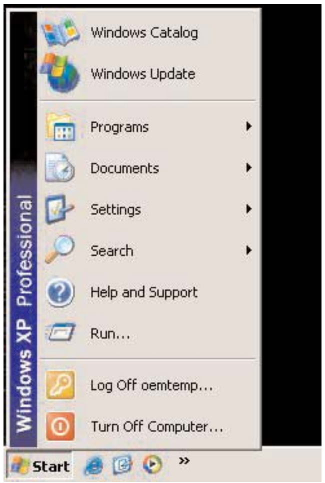
16. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up with a static IP address, allowing the user to access the Modem's Advanced Setup utility.

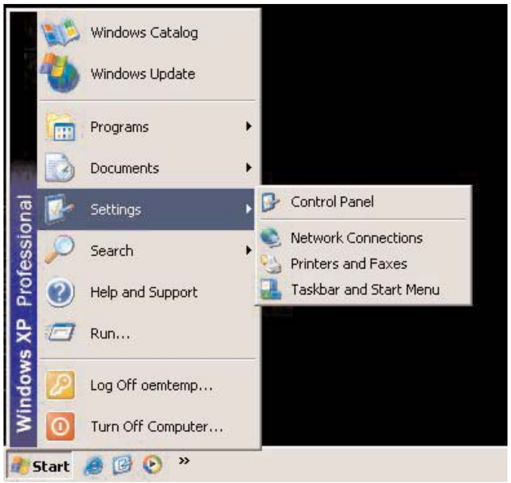
Windows XP

1. From the desktop, click on the **Start** button in the lower left corner.

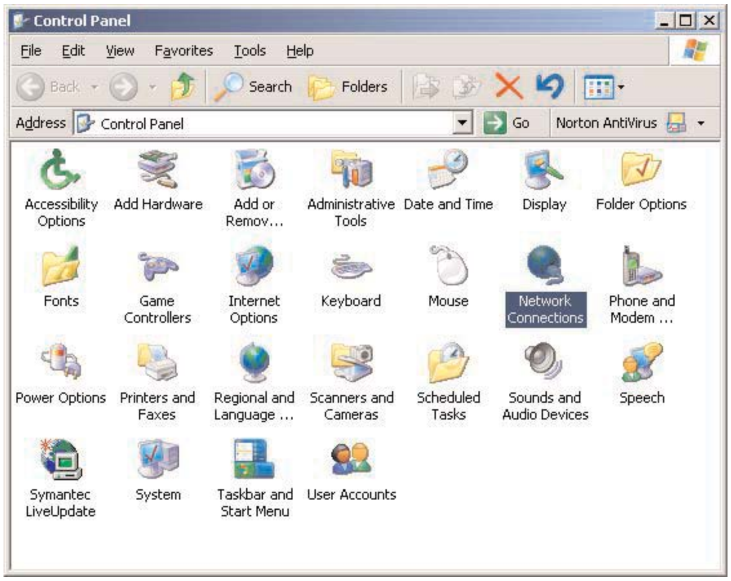
2. From the menu that appears, select **Settings**.


Windows XP Professional
Windows Catalog
Windows Update
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off oemtemp...
Turn Off Computer...
Start

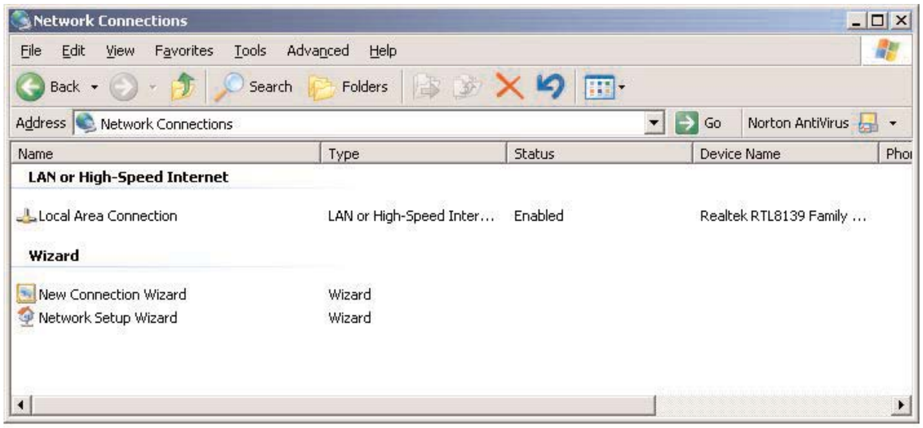
3. Another menu appears. Select **Control Panel**.


Windows Catalog
Windows Update
Programs
Documents
Settings
Search
Help and Support
Run...
Log Off oemtemp...
Turn Off Computer...
Windows XP Professional
Control Panel
Network Connections
Printers and Faxes
Taskbar and Start Menu
Start

4. When the “Control Panel” window appears, double-click **Network Connections**.

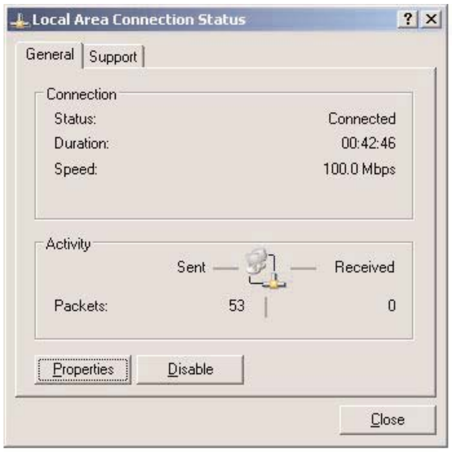

Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Go Norton AntiVirus
Accessibility Options
Add Hardware
Add or Remov...
Administrative Tools
Date and Time
Display
Folder Options
Fonts
Game Controllers
Internet Options
Keyboard
Mouse
Network Connections
Phone and Modem ...
Power Options
Printers and Faxes
Regional and Language ...
Scanners and Cameras
Scheduled Tasks
Sounds and Audio Devices
Speech
Symantec LiveUpdate
System
Taskbar and Start Menu
User Accounts

5. In the "Network Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If there is more than one Local Area Connection listed, locate the one that corresponds to the network card installed in your computer by finding the name of the network card in the **Device Name** column.


Network Connections
File Edit View Favorites Tools Advanced Help
Back
Search
Folders
Address
Network Connections
Go
Norton AntiVirus

Name	Type	Status	Device Name	Phoi
LAN or High-Speed Internet				
Local Area Connection	LAN or High-Speed Inter…	Enabled	Realtek RTL8139 Family …	
Wizard				
New Connection Wizard	Wizard			
Network Setup Wizard	Wizard			

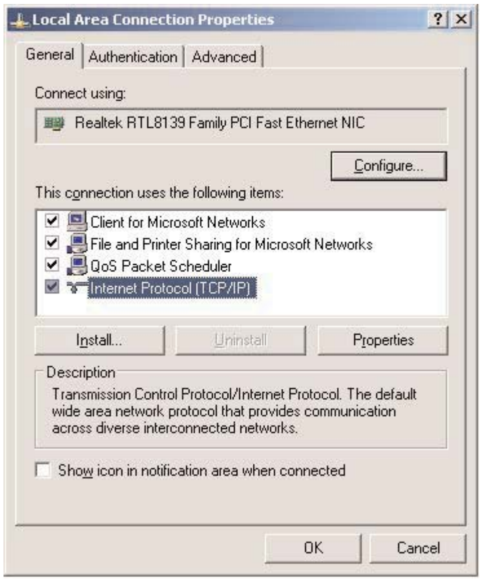
6. The "Local Area Connection Status" window appears. Select **General**, then click **Properties**.


Local Area Connection Status
General
Support
Connection
Activity
Sent
Received
Properties
Disable
Close

Status: Connected
Duration: 00:42:46
Speed: 100.0 Mbps
Packets: 53 0

7. The “Local Area Connection Properties” window appears. Select **General**.

8. In the “Components checked are used by this connection” list box, double-click **Internet Protocol** (TCP/IP).


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

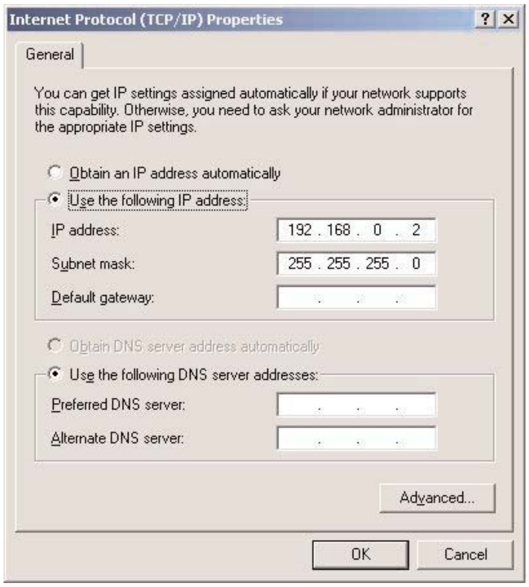
Connect using:
Realtek RTL8139 Family PCI Fast Ethernet NIC

This connection uses the following items:
☑ Client for Microsoft Networks
☑ File and Printer Sharing for Microsoft Networks
☑ QoS Packet Scheduler
☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☐ Show icon in notification area when connected

9. The “Internet Protocol (TCP/IP) Properties” window appears.


Internet Protocol (TCP/IP) Properties
General
Advanced...
OK
Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 0 . 2
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

10. In the **General** tab, make sure the the circle next to “Obtain an IP Address automatically” is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

11. Enter the following numbers in the "IP Address" text box:

`198.162.0.2`

Do not include the periods; they are automatically entered.

12. Enter the following numbers in the "Subnet mask" text box:

`255.255.255.0`

Do not include the periods; they are automatically entered.

13. Click **OK**. The Internet Protocol (TCP/IP) Properties window disappears.

14 In the Local Area Connection Properties window, click **OK**. The Local Area Connection Properties window disappears.

15. Click **Close** in the Local Area Connection Status window. The window disappears.

16. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up with a static IP address, allowing the user to access the Modem's Advanced Setup utility.

Specifications

B

General

Model Number

GEU004AD9-01 (USB/Ethernet DSL Modem)

Standards

IEEE 802.3 (10BaseT)
IEEE 802.3u (100BaseTX)
G.dmt
G.lite
RFC 1483, 2364, 2516

Protocol

CSMA/CD t1.413

WAN

Full-rate DSL modem

LAN

10Mbps Ethernet port
USB port
Upload port

Cabling Type

10BaseT: UTP/STP Category 3 or 5
USB

Certifcations

FCC Class B
FCC Class C (parts 15, 68)
UL

Environmental

Power Input

External, 12V DC, 1.2 A

Operating Temperature

0° C to 40° C (32°F to 104°F)

Storage Temperature

-20°C to 70°C (-4°F to 158°F)

Operating Humidity

10% to 85% non-condensing

Storage Humidity

5% to 90% non-condensing

MAC Address

C

This appendix explains how to determine the MAC address of an Ethernet adapter installed on a computer. Select the operating system and follow the instructions.

Windows 95, 98

1. Click **Start**, then **Run**.

2. The "Run" window appears. In the "Open" text box, enter:

```
ipconfig/all
```

3. Click **OK**. The "IP Configuration" window appears.

4. Note the "Adapter Address," which is the MAC address of the installed Ethernet adapter.

Windows Me

1. Click **Start**, then **Run**.

2. The "Run" window appears. In the "Open" text box, enter:

```
winipcfg
```

3. Click **OK**. The "IP Configuration" window appears.

4. Note the "Adapter Address," which is the MAC address of the installed Ethernet adapter.

Windows 2000

1. Click **Start**, **Programs**, Accessories, **Command Prompt**.

2. When the "Command Prompt" window appears, enter:

```
ipconfig/all
```

then press **Enter** on the keyboard.

3 A list of information about the Ethernet adapter appears.

4. Note the "Physical Address," which is the MAC address of the installed Ethernet adapter.

Windows NT 4.0

1. Click **Start**, **Programs**, **Command Prompt**.

2. When the "Command Prompt" window appears, enter:

```
ipconfig/all
```

then press **Enter** on the keyboard.

3 A list of information about the Ethernet adapter appears.

4. Note the "Physical Address," which is the MAC address of the installed Ethernet adapter.

Macintosh

1. Select **Apple**, **Control Panels**, **TCP/IP**.

2. In the "TCP/IP" window, click **Info**.

3. The "TCP/IP Info" window appears. In the "Addresses" section, note the "Hardware address," which is the MAC address of the installed Ethernet adapter.

Program and Port List

D

Application Type	Notes	Port Forwarding Settings	
Services		**Outgoing Connection**	**Incoming Connection**
HTTP	Netscape, Internet Explorer		80/client IP
FTP	Windows FTP, Cuteftp		21/client IP
TELNET	Windows Telnet, Neterm		23/client IP
POP3	Eudora		110/client IP
SMTP	Eudora		25/client IP
mIRC	mIRC		113/client IP
Network Time Protocol (NTP)		123	123/client IP
PPTP	Windows PPTP		1723/client IP
Applications			
BAYVPN		500/client IP	
CarbonCopy/32			1023-1690/client IP
CITRIX			1494/client IP
Cu-SeeMe2	Cornell 1.1		7648/client IP
	White Pine 3.1.2	7643/client IP; 24032/client IP	Default/client IP
	White Pine 4.0 (CU-SeeMe Pro)	7643/client IP; 24032/client IP	Default/client IP
Direct Connect			375-425/client IP
FW1VPN		259/client IP	
ICQ	For file transfer, enable ICQ - preference - connections - firewall, then set the firewall time out to 80 seconds		Default/client IP
Laplink			1547/client IP
Lotus Notes			1352/client IP
Microsoft NetMeeting	2.1, 2.11		1720/client IP; 1503/client IP; 1503-TCP (T-120 data conferencing); 1720-TCP (H-323 call setup); 1731-TCP (H-323 audio call control); dynamic (1024-65535) TCP (H-323 call control), UDP (H-323 streaming)
PC Anywhere	Host must be on LAN side and client IP set		22/client IP; 5631-5632/client IP
RealPlayer	G2		
Remote Anything			3996-4000/client IP
Shiva VPN	Set mobile option to public IP addres	2233/client IP	2233/client IP
Virtual Network Computing (VNC)			5500/client IP; 5800/client IP; 5900/client IP
VDO Live			

Application Type	**Notes**	**Port Forwarding Settings**	
Games		**Outgoing Connection**	**Incoming Connection**
Aliens vs. Predator			80/client IP; 2300-2400/client IP; 8000 8999/client IP
Asherorls Call	May need to open MSN/DX ports	9000-9013/client IP	9000/9013/client IP
Black and White			2611-2612/client IP; 6500/client IP; 6667/client IP; 27900/client IP
Dark Reign 2			26214/client IP
Delta Force		3100/client IP; 3568/client IP, 3999/client IP	3100/client IP; 3568/client IP; 3999/client IP
Dune 2000		1140-1234/client IP; 4000/client IP	1140-1234/client IP, 4000/client IP
Elite Force			26000/client IP; 27500/client IP; 27910/client IP; 27960/client IP
Everquest			1024-6000/client IP; 7000/client IP
F22-Lightning 3			4533-4660/client IP
Fighter Ace II			50000-50100/client IP
Fighter Ace II (DX)			2300-2400/client IP; 47624/client IP; 50000-50100/client IP
Half Life			27015/client IP
Heretic II			28910/client IP
Hexen II	Each computer must use a different port number (add 1 for each player, starting at 26900)		26900/client IP (add 1 for each player
Kali	Each computer must use a different port number (add 1 for each player, starting at 2213)		2213/client IP (add 1 for each player); 6666/client IP
MSN GameZone			6667/client IP; 28800-29000/client IP
MSN GameZone (DX)			2300-2400/client IP; 47624/client IP
Myth			3453/client IP
Need for Speed			9942/client IP
Need for Speed 3			1030/client IP
Outlaws			5310/client IP
Quake I			Default/client IP
Quake II			27910/client IP
Quake III	Each computer must use a different port number (add 1 for each player, starting at 27660)		27600/client IP (add 1 for each player
Rainbow Six		2346/client IP	2346/client IP
Rogue Spear		2346/client IP	2346/client IP
StarCraft			6112/client IP
Tiberian Sun		1140-1234/client IP; 4000/client IP	1140-1234/client IP, 4000/client IP
Ultima			5001-5010 Game; 7775-7777 Login; 8888, 9999 Patch; 8800-8900 Messenger; 7875 Monitor
Unreal Tournament	Modify UWEB Web Server section of the server.ini file by setting ListenPort to 8080 and SeverName to public IP of the router		7777 Game; 7778 Server; 7779-7783 UdpLink; 27900 Server Query; 8080 UT Server Admin

Glossary

Access Point

A device that allows wireless clients to connect to one another. An access point can also act as a bridge between wireless clients and a “wired” network, such as an Ethernet network. Wireless clients can be moved anywhere within the coverage area of the access point and remain connected to the network. If connected to an Ethernet network, the access point monitors Ethernet traffic and forwards appropriate Ethernet messages to the wireless network, while also monitoring wireless traffic and forwarding wireless client messages to the Ethernet network.

Client

A desktop or mobile computer connected to a network.

DHCP (Dynamic Host Configuration Protocol)

A protocol designed to automatically assign an IP address to every computer on your network.

DNS (Domain Name System) Server Address

Allows Internet host computers to have a domain name and one or more IP addresses. A DNS server keeps a database of host computers and their respective domain names and IP addresses so that when a user enters a domain name into a Web browser, the user is sent to the proper IP address. The DNS server address used by computers on the home network corresponds to the location of the DNS server the ISP has assigned.

DSL (Digital Subscriber Line) Modem

A modem that uses existing phone lines to transmit data at high speeds.

Encryption

A method to allow wireless data transmissions a level of security.

ESSID (Extended Service Set Identifier)

A unique identifier for a wireless network. Also known as “SSID.”

Ethernet Network

A standard wired networking configuration using cables and hubs.

Firewall

A method preventing users outside the network from accessing and/or damaging files or computers on the network.

Gateway

A central device that manages the data traffic of your network, as well as data traffic to and from the Internet.

IP (Internet Protocol) Address

A series of four numbers separated by periods identifying a unique Internet computer host.

ISP Gateway Address

An IP address for the Internet router. This address is only required when using a cable or DSL modem.

ISP (Internet Service Provider)

A business that allows individuals or businesses to connect to the Internet.

LAN (Local Area Network)

A group of computers and devices connected together in a relatively small area (such as a house or an office). A home network is considered a LAN.

MAC (Media Access Control) Address

The hardware address of a device connected to a network.

NAT (Network Address Translation)

A method allowing all of the computers on a home network to use one IP address, enabling access to the Internet from any computer on the home network without having to purchase more IP addresses from the ISP.

PC Card

An adapter that inserts in the PCMCIA slot of a computer, enabling the communication with the Router.

PPPoE (Point-to-Point Protocol over Ethernet)

A method of secure data transmission.

Router

A central device that manages the data traffic of your network.

Subnet Mask

A set of four numbers configured like an IP address used to create IP address numbers used only within a particular network.

SSID

See "ESSID."

TCP/IP (Transmission Control Protocol/Internet Protocol)

The standard protocol for data transmission over the Internet.

WAN (Wide Area Network)

A network that connects computers located in separate areas, (i.e., different buildings, cities, countries). The Internet is a WAN.

WECA (Wireless Ethernet Compatibility Alliance)

An industry group that certifies cross-vender interoperability and compatibility of IEEE 802.11b wireless networking products and promotes the standard for enterprise, small business, and home environments.

WLAN (Wireless Local Area Network)

A group of computers and other devices connected wirelessly in a small area.

Notices

Regulatory Compliance Notices

Class B Equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by implementing one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by *Action*tec Electronics, Inc., may void the user's authority to operate the equipment.

Declaration of conformity for products marked with the FCC logo – United States only.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. This device must accept any interference received, including interference that may cause undesired operation.

> ☞ ***Note***: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

For questions regarding your product or the FCC declaration, contact:

*Action*tec Electronics, Inc.
760 N. Mary Ave.
Sunnyvale, CA 94086
United States
Tel: 408.752.7700
Fax: 408.541.9005

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Return the product to:
(In the United States)
*Action*tec Electronics, Inc.
760 North Mary Avenue
Sunnyvale, CA 94085

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